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Florida WILDLIFE®

Volume 55, Number 5

September-October 2001

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THE UPPER ST. JOHNS RIVER : Success, Recreation, History

2001 ART CONTEST

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Printed by Colonial Press International, Miami, FL

Florida Wildlife (ISSN 0015-4369) is published bimonthly by the Florida Fish and Wildlife Conservation Commission. Periodical postage paid at Tallahassee, Florida. Post Office Publication Number 202440. Materials in *Florida Wildlife* include copyrighted materials that are the property of individual contributors. Written permission to use the Publisher's materials will be granted by the editor for noncommercial, public informational purposes. Manuscripts, photographs and other submissions are received only with the understanding that the Publisher assumes no responsibility for any loss or damage. Contributors should request "How To Submit" guidelines before sending materials.

Single copy price $3.50. Subscription rate for one year is $12 (6 issues), two years $22.50 and three years $32. Send address changes to: *Florida Wildlife*, Circulation Office, P.O. Box 6150, Tallahassee, FL 32314-6150; phone (850) 488-9477.

FWC Home Page on the World Wide Web:
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A Message from the Executive Director

Nature is giving the Florida Fish and Wildlife Conservation Commission a rare opportunity to enhance one of our natural wonders: Lake Okeechobee. The drought that began in October of 1998 has left some areas of our state with a rainfall deficit of more than 80 inches, resulting in some fish and wildlife losses, the spread of wildfires, and which has endangered farms and businesses. But for Lake Okeechobee, it is an opportunity to improve the lake and restore fish habitats.

We have known for years that excessive nutrients can upset the natural balance of a lake. At Lake Okeechobee, there is a second problem: an unnatural level of high water has destroyed large areas of aquatic vegetation. High water levels deny needed sunlight to aquatic plants and cause increased wave action which, stirs up sediments that cloud the water and physically uproot aquatic plants. On Lake Okeechobee, wave action pushed uprooted plant material together at the edge of the marsh, forming an organic berm, preventing fish from accessing the marsh and not allowing the marsh to dry during lower water levels. The drought is giving us a chance to fix this and restore one of the country's premier bass and crappie fishing lakes.

The South Florida Water Management District lowered the lake approximately one foot in May 2000 for habitat improvement purposes. However, the combination of evaporation and severe drought dropped the lake level an additional five feet. This historic low has provided us the opportunity to remove the berm, reintroduce aquatic plants and restore marsh habitat. When the project is completed, a barrier of dead organic material six miles long and 260 feet wide will have been removed, allowing the marsh to further dry out and to allow fish access to the marsh when water levels rise.

The marsh serves as spawning, nursery and rearing habitat for fish and as nesting and feeding habitat for birds. The marsh also protects the lake from filtering runoff, preventing nutrients from entering the lake.

Drawdowns at other lakes have taught us a few things. When the rains return and the water level rises, the marsh will be healthier, and fish populations should rebound. If the past is any indication, the fishing success of anglers will increase dramatically in the next five years.

Although droughts can cause environmental and economic hardships, they are part of a natural cycle. Man cannot control nature, but there are times when we can work with it. In the case of Lake Okeechobee, we are accepting the current conditions as an opportunity to restore a fishery and enhance the health of the largest freshwater lake in Florida.

– Allan L. Egbert, Ph.D.

Florida WILDLIFE®

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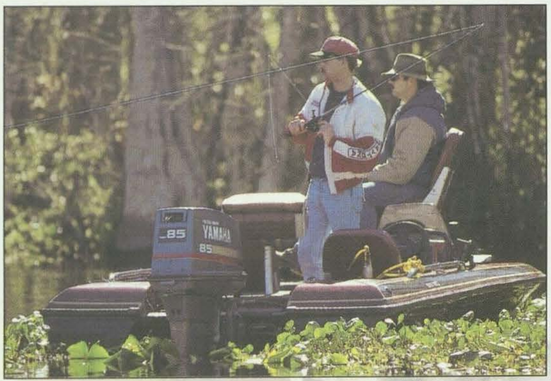

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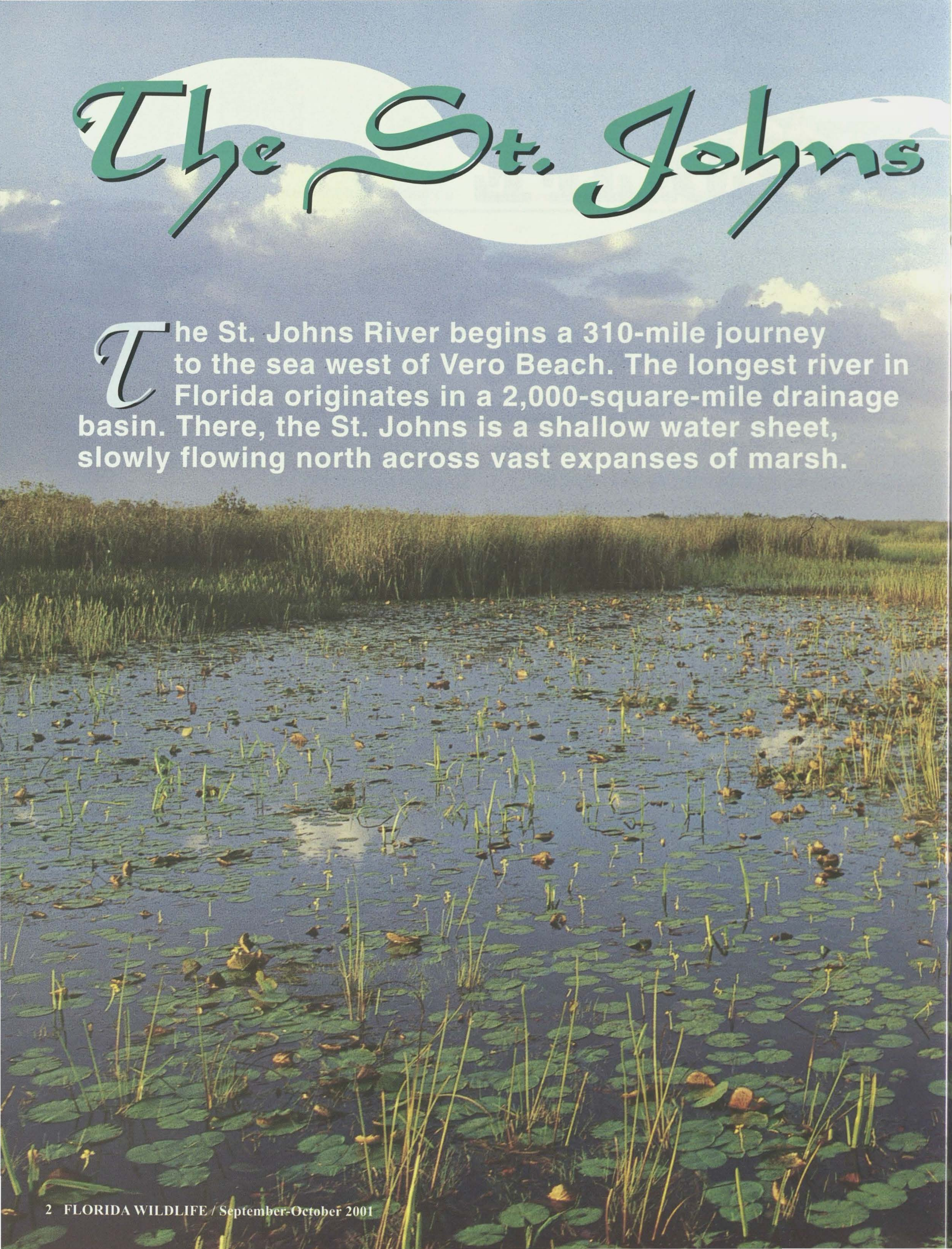
The St. Johns

The St. Johns River begins a 310-mile journey to the sea west of Vero Beach. The longest river in Florida originates in a 2,000-square-mile drainage basin. There, the St. Johns is a shallow water sheet, slowly flowing north across vast expanses of marsh.



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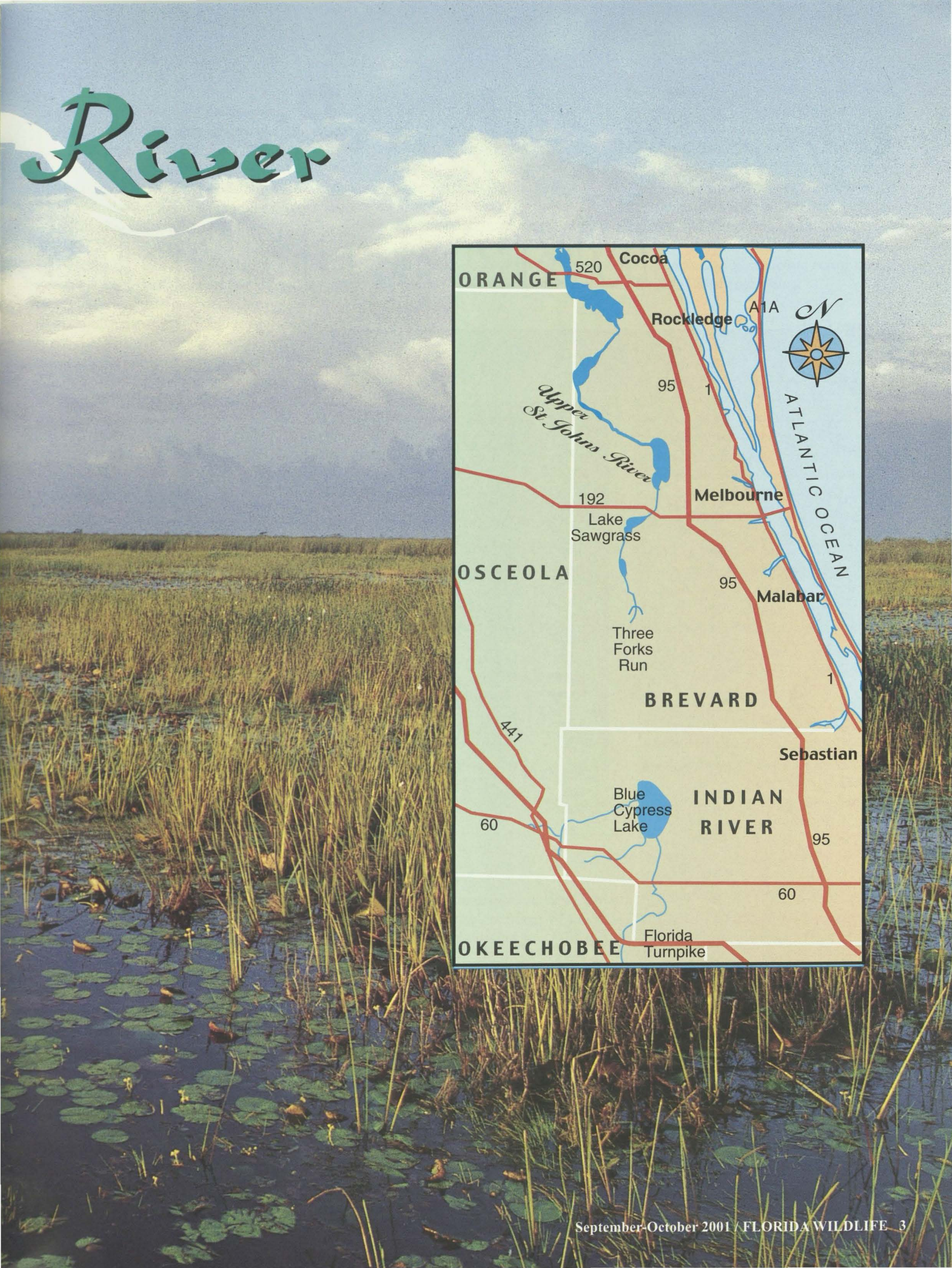
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OKEECHOBEE

The St. Johns River

Making It Right

By James Call

In the frontier days, before man truly understood the workings of the Florida ecosystem, dikes were constructed and ditches dug to drain the marsh at the headwaters of the St. Johns River. The soil under the water was rich and was needed to grow citrus and row crops and raise cattle.

In those days people didn't appreciate the inter-dependency of nature. The marsh was seen as a problem. It was a wetland on land needed to produce food. Canals were built to divert water into the Indian River Lagoon. At the time, federal and state lawmakers thought this was a good idea.

It wasn't. And for the past 24 years Maurice Sterling, a project manager with the St. Johns Water Management District, has worked to fix what went wrong with plans based on that idea.

"Freshwater marshes are an imperiled resource," said Sterling. "And this is the largest marsh restoration project in the nation."

St. Johns Water Management District

A green heron searches for food along the St. Johns River.

The huge marsh served many purposes. Marsh plants filtered pollutants and sediments from water, cleansing it. The marsh also, in a sense, stored surplus water, preventing floods. And the marsh provided habitat for birds, fish and other wildlife. The nature of a marsh may not be apparent to the untrained eye; sort of being unable to see the forest because of the trees. Unfamiliar with the natural workings, people saw the marsh as a huge, shallow puddle, a problem to be dealt with rather than a vital component of a healthy ecosystem.

Between 1900 and 1970 almost 300,000 acres in the Upper St. Johns River Basin were drained and a host of new problems were created. Devastating floods occurred, especially in the 1920s and 1940s. Water quality declined with the removal of plants. Wildlife was displaced by the loss of habitat. And the shellfish and sport fishing industries that thrived along the Indian River Lagoon were threatened by the diversion of fresh water into the estuary.

Changes in federal and state laws and a better understanding of nature created an opportunity to implement a plan to enable nature and farming to coexist. The plan leaves land for agriculture, controls floods, restores habitats, improves water quality and protects the Indian River

This is the largest marsh restoration project in the nation.

Lagoon estuary. Work on the project began in 1988 and is nearing completion.

"The primary purpose is flood protection," said Sterling. "The secondary purpose includes environmental enhancement and recreational opportunities."

The project restores more than 150,000 acres of marsh in Indian River and Brevard counties. This includes plugging canals and building 20,000 acres of reservoirs to collect water from surrounding citrus groves and cattle ranches. The agricultural runoff is rich in nutrients and contains pesticides. It is kept separate from the water that eventually becomes the St. Johns River or drains into the Indian River Lagoon. But the water can support fish habitats. And this creates an opportunity for sportsmen and women to engage in a favorite pastime: fishing!

"The water is there for the farmers, it is stored there, in case of a drought, but because it's there, we work with it as a fishery, thereby the two benefits coexist," said Bob Eisenhower, a Florida Fish and Wildlife Conservation Commission (FWC) fishery biologist.

The reservoirs created to prevent floods and water flowing into the St. Johns and the Indian River Lagoon have become legendary fishing spots. The Stick Marsh/Farm 13, Ansin Garcia and Kenansville Lake have national reputations. The FWC manages them with specific regulations and provides public access.

"Before we built a ramp at the Stick Marsh," recalled Dale Jones, a fisheries biologist, "people would get their trucks stuck in the mud to launch their boat. And a tow truck would be waiting for them when they were through fishing to pull them out. The fishing is that good."

A boat launch was installed about 10 years ago and illustrates how the project is a win-win-win situation. It benefits the environment by isolating water that could disrupt a variety of ecosystems with either an abundance of nutrients or fresh water. It permits agriculture to continue in an area with rich soil and a tradition of farming by storing water and preventing flooding. And it creates recreational opportunities including boating, hiking, biking, wildlife viewing, camping, fishing and hunting.

The $195 million project treats the river as a natural ecosystem while providing a sustainable flood-management plan. Water-quality modeling performed by the water management district has shown that construction of the reservoirs may be the best approach.

"By the construction of the water management areas, there is enough storage in the valley to contain the lion's share of a flood," said Sterling. "It's well in excess of a 25-year storm event."

"The water management areas are new opportunities to create sport fishing areas without any conflict to other stakeholders," said Eisenhower. "You have other considerations but you can get that recreational component, with balance."

James Call is associate editor of Florida Wildlife *magazine.*

William J. Weber

Orange groves: the rich soil along the St. Johns makes it ideal to raise citrus.

The St. Johns River

Recreation

St. Johns Water Management District

The following are selected state forests, preserves, conservation, restoration and wildlife management areas found along the St. Johns River. For more information contact your regional FWC office. See the list on page 32, or call the water management district at (904) 329-4500.

NAME/COUNTY	BIRDING	HIKING	FISHING	CAMPING	BOATING	HUNTING
Bayard Clay	✓	✓	✓	✓	✓	✓
Black Creek Clay	✓	✓	✓	✓	✓	
Blue Cypress Indian River	✓	✓	✓	✓	✓	✓
Buck Lake Brevard and Volusia	✓	✓	✓	✓		✓
Bull Creek Osceola	✓	✓	✓	✓		✓
Canaveral Marshes Brevard	✓	✓	✓		✓	
Caravelle Ranch Putnam	✓	✓	✓	✓	✓	✓
Crescent Lake Flagler and Volusia	✓	✓	✓	✓	✓	
Deep Creek St. Johns	✓		✓		✓	
Dunns Creek Putnam	✓	✓	✓	✓	✓	✓
Emeralda Marsh Lake	✓	✓	✓	✓	✓	✓
Ft. Drum Marsh Indian River	✓	✓	✓	✓		✓
Graham Swamp Flagler	✓	✓	✓	✓		

NAME/COUNTY	BIRDING	HIKING	FISHING	CAMPING	BOATING	HUNTING
Hal Scott Regional Orange	✓	✓	✓	✓		
Heart Island Volusia	✓	✓		✓		✓
Jennings State Clay	✓	✓	✓	✓		✓
Lake George Putnam and Volusia	✓	✓	✓	✓	✓	✓
Lake Jessup Seminole	✓	✓	✓	✓	✓	
Lake Monroe Volusia	✓	✓	✓	✓	✓	
Lake Norris Lake	✓	✓	✓	✓		
Little Big-Econ Seminole	✓	✓	✓			✓
Moses Creek St. Johns	✓	✓	✓	✓	✓	
Murphy Creek Putnam	✓	✓		✓	✓	
Ocklawaha Prairie Marion	✓	✓		✓		
Oslo Riverfront Indian River	✓	✓	✓		✓	
Pellicer Creek Flagler	✓	✓	✓	✓	✓	
Pine Island Brevard	✓	✓	✓			
Ralph E. Simmons Nassau	✓	✓	✓	✓	✓	✓
River Lakes Brevard and Osceola	✓		✓	✓	✓	✓
St. Sebastian River Brevard and Indian River	✓	✓	✓	✓	✓	
Seminole Ranch Volusia, Orange, Brevard, Seminole	✓	✓	✓	✓	✓	✓
Stokes Landing St. Johns	✓	✓	✓			
Sunnyhill Marion	✓	✓	✓	✓	✓	
Three Forks Marsh Brevard	✓	✓	✓	✓	✓	✓
Tiger Bay Volusia	✓	✓		✓		✓
Triple H Ranch Osceola	✓	✓		✓		✓
Wekiva River Seminole	✓	✓	✓			

The St. Johns River

Winding Through

By Gail Fishman

The St. Johns River, at 310 miles the longest river entirely within Florida, creeps from sawgrass marshes north of Lake Okeechobee and slowly slides over a gradient that drops about an inch per mile to its wide mouth gaping into the Atlantic Ocean at Jacksonville. The St. Johns moves at a lazy pace between banks where grasses and vines compete with tupelo, cypress, wax myrtle, palms and glossy green magnolias and bays for every available inch.

Coastal towns and river settlements took hold early on, but Florida was among America's last frontiers to be settled. In 1867 John Muir wrote, "Florida is so watery and vine-tied that pathless wanderings are not easily possible in any direction." Nevertheless, the state's rivers and mild winter climate have long been a magnet for travelers and explorers.

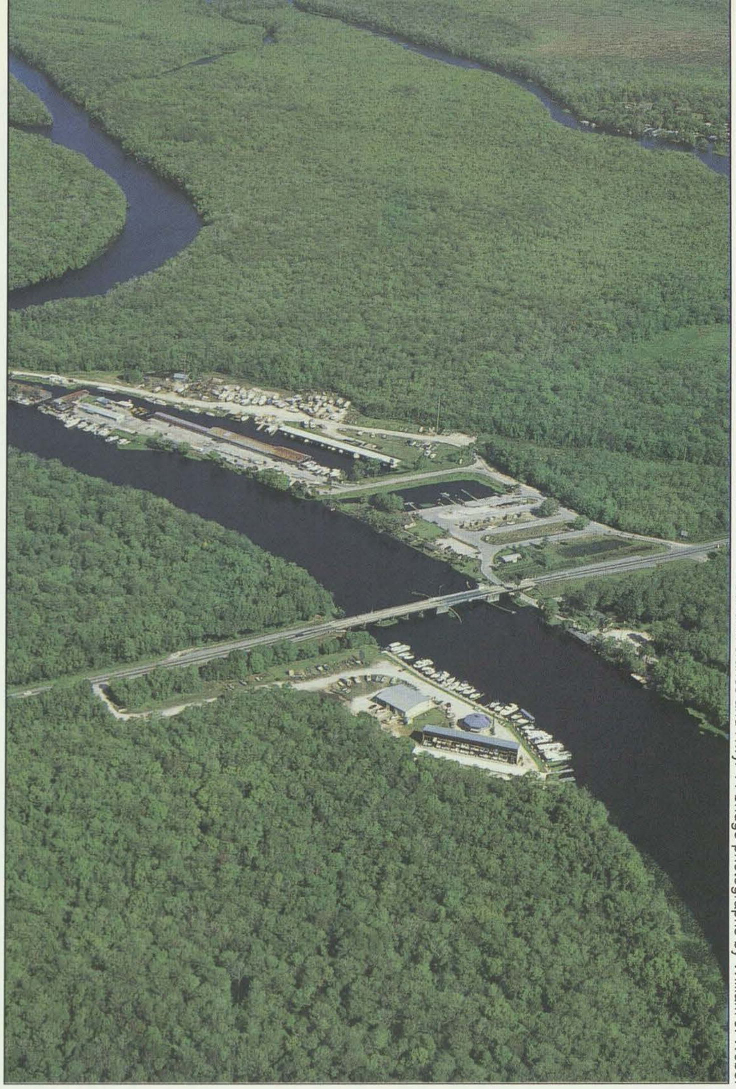
Of all that has been written about the St. Johns, no book has gripped my imagination like William Bartram's *Travels*. In his time, the western bank was given to Indian villages, sometimes built upon mounds left by other cultures, while white settlers improved the eastern side. Bartram first visited the river in 1765 with his father, John Bartram, the Royal Botanist to the King of England. The Bartrams were probably the first white people to follow the river from its mouth at Cowford, near present-day Jacksonville, to the marshy headwaters. William was so taken with the river that he returned a decade later.

The naturalist fished for his food and often joined traders to share the bounty they offered: venison, turkey, turtles and even a sandhill crane, though Bartram said its cry was more enjoyable than its flesh. Sometimes he was able to use a sail, and sometimes he poled or rowed his small boat over water stained with coppery tannins from fallen leaves. Although several springs fed the St. Johns, its waters were not crystal clear, but Bartram could often see a sandy bottom.

Carolina parakeets cavorted in huge cypress trees and ivory-billed woodpeckers hammered away in surrounding swamps. Bartram endured periods of solitude, observing, sketching and writing for hours at a time. Heat and insects plagued him, "Having finished my observations, I betook myself to rest; and

History

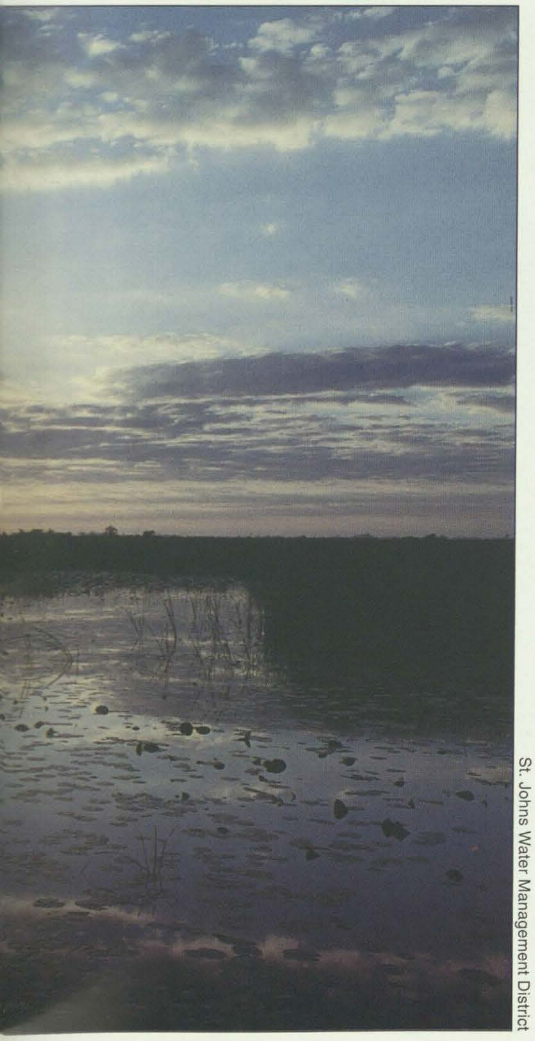
when the plunging and roaring of the crocodiles, and the croaking of the frogs had ceased, I slept very well during the remainder of the night; as a breeze from the river had scattered the clouds of musquitoes (sic) that at first infested me." He usually pitched his camp on a high, open shell mound, "an ample field for botanical employment. It was a high, airy situation, and commanded an extensive and varied prospect of the river. . ." Alligators fascinated him, but greater was his wonder at the green world that spread in any direction he looked.



Sandhill cranes, page 8-9.

The St. Johns River flows beneath the Highway 44 bridge.

Sandhill cranes and Hwy. 44 bridge photographs by William J. Weber



St. Johns Water Management District

The river he saw was not a primeval wilderness. Native people had lived there for centuries. Newly settled farmers on the east shore cleared the forest because they thought mosquitoes bred there. Traders moved up and down the river with supplies.

Modern-day explorers can rent a houseboat to float on the St. Johns. Each unit is equipped with a generator to run the appliances – such as the air-conditioner, refrigerator and lights. Gasoline engines power the craft along the winding St. Johns with a turn of the wheel. Modern travelers keep heat and mosquitoes at bay with air-conditioning and screens. During the trip visitors can watch for alligators, endangered manatees and dozens of bird species; fish for bluegill, largemouth bass, bream, shellcracker, speckled perch, gar and catfish; or read of Bartram's adventures on a river of memory.

Although parakeets and ivory-bills are gone, numerous osprey still raise their young and pluck a meal from the surface. Grizzled moss sways from elegant cypress, but the enormous trees that Bartram saw have all gone to timber and the shell mounds have been taken for road foundation material.

Still, the St. Johns sinewy length flows between green walls. Much of the area owned by the St. Johns River Water Management District, the U.S. Forest Service and the state of Florida is protected from development. Weekends are busy, but a mid-week trip can transport visitors back to a time when life moved only as fast as the river's current.

Gail Fishman, author of Journey Through Paradise, *writes from Tallahassee.*

The St. Johns River

A Personal History

By Ed Winn

Retired insurance executive Ed Winn grew up along the banks of the St. Johns. The following story about adventures at a fish camp on Lake Winder, circa 1940, is excerpted from his book I never had enough money to leave town.

Mr. Bumby had a caretaker who lived at his place for a number of years, and he fed a large flock of turkeys in a clearing very close to the house. I never saw it, but Mr. Bumby said the turkeys would walk around the caretaker close enough for him to reach out and touch them when he threw out their daily corn. The day before hunting season, he would feed the birds and then while he was in the middle of the flock he would fire his gun in the air. The birds would fly away and not come back until hunting season was over!

Just south of the house near the lake there was a large Indian mound. It was rich with pieces of bone and chips of pottery. I was allowed to dig all I wanted to, but when I was through I had to replace what I had found. Usually, just before I began to dig, I had to take the shovel and throw off a pygmy rattler or two, as they liked to sun themselves on the sandy mound.

There were lots of wild razorback pigs in the woods. They frequented the camp for scraps. They were a huge nuisance, because when you came in from fishing with a string of bass, you had to carry an oar to run them off or they would steal your fish, with one exception. That was "John" the pet pig. John was a runt of a pig who lived under the house. The house was set about 4 feet above the ground, and that made fine living quarters for a pet pig. Anyway, John was excellent company. He would come when called, oink, oinking all the way. We took long walks together in the woods. You did not have to worry about snakes, because when he saw one, John would promptly eat it. I had a board with a nail through it made especially to scratch John's back. He loved to be scratched. He'd talk to you all the while.

. . . I think I enjoyed watching the bird life around the lake almost as much as the fishing. There were lots of long, skinny Blue Herons all along the shore. I liked to see the long flights of the white curlews. They came in long, long lines and flew so low over your head you could hear their wings beating in the air. They would fly in V formations, very informal, kind of sloppy formations, flying like they were never in a hurry. They would glide; then when it was time, flop their wings a time or two and glide again. As they passed over, you could see their beautiful white feathers and orange beaks and faces framed under bright blue sky.

The Lake Winder days were very special to me, and I will never forget them or stop appreciating them. I've always thought that when the Lord made the world, He saved His very best for central Florida.

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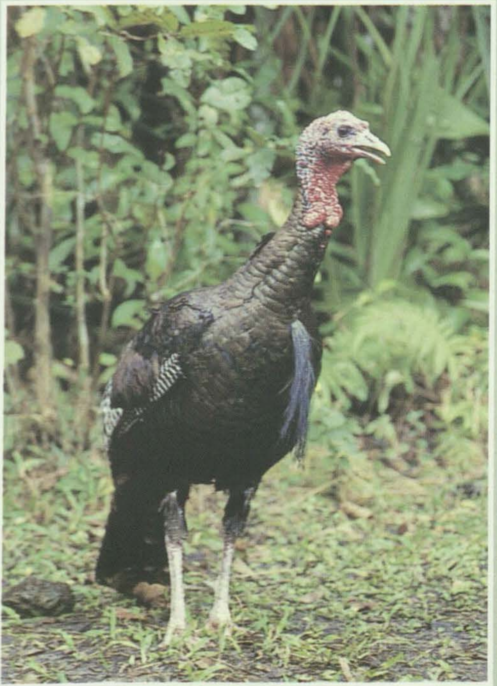
New FWC Program Recognizes Outstanding Gobblers



Charlie Heidecker

The Wild Turkey Registry issues certificates to sportsmen who bag outstanding gobblers of either of Florida's subspecies. To qualify for an "Outstanding Gobbler Certificate: Osceola Subspecies," a hunter must harvest a turkey south of (but not including) Taylor, Lafayette, Suwannee, Columbia, Baker and Nassau counties. The bird must have a beard at least 11 inches long and spurs at least $1\frac{1}{4}$ inches long. Turkeys taken in those counties and points north and west (hunting turkeys in Holmes County is prohibited) will qualify hunters for an "Outstanding Gobbler Certificate: Eastern Subspecies" if it meets the same beard and spur requirements.

In addition, hunters under 16 years old can qualify for a "First Gobbler Certificate" when they harvest a legal gobbler in Florida for the first time, regardless of beard or spur measurements.

Applications are available now from the FWC's regional offices, specialty stores and Wild Turkey Management Section, 5300 High Bridge Rd., Quincy, FL 32351, (850) 627-9674.

Sharing Wild Florida

By Doug Alderson

A group of teenagers and I sat by water's edge at Largo Sound in the Keys as night fell. Emerging stars swept us into the great chasm of the cosmos. Lightning lit up the horizon, focusing our attention on a long silhouette of mangroves. Somewhere beyond were coral reefs.

A student in my group looked into the vastness with awe and said, "There is so much life out there!" We had been studying mangrove and coral reef ecology in a classroom. The next morning we planned to explore those environments first hand.

Top: shells by Lynn Stone

Doug Alderson

That night, as I did many other times, I asked myself what turns young people on to "the Wild Florida"? Was it trips like this to the Keys and someone seeing his or her first pulsing moon jellyfish? Was it in viewing the colorful tangs, parrotfish, angelfish and corals? Or was it spotting the spectacular reef butterfly fish with its distinctive eye-concealing black band? Maybe it is simply swimming through a school of a million plus minnows that arise tornado-like from coral caverns and watching them move as if they were one organism?

I saw many young people turn on to nature during days in the Keys. I watched them snorkle around the roots of red mangroves and become fascinated with garlands of mermaid's wineglass algae, among the largest single-celled plants in the world. I saw colorful sponges capture the teenagers' imagination and the fun they had spraying each other sea squirts. It was a trip to remember. The students seem to gain an appreciation of unique natural systems.

There are many places in Florida that offer many opportunities for the young to experience the natural world. It happens on one's first turkey hunt at dawn when a gobbler calls from a treetop.

I remember almost everything about my first, and still largest, bass. I was fishing with my dad on a cypress-ringed lake in the Apalachicola National Forest. A full moon was rising and we swung the canoe into a small marshy cove. The water was as still as glass, but when I cast a jitterbug near water lilies the calm evaporated in one big explosion. The bass was no state record, but it is my record and a cherished memory.

When I teach summer camp and environmental education classes I try to provide opportunities for my students to create such memories of their own. There are times when I can point to a specific instance where a breakthrough was made, where a light of fascination and understanding was turned on. It might have been when we found a grassy place where a deer had lain or a tree that a black bear used to mark territory. It has happened while wading down a shallow river with a camera and while tracking a wild turkey along a sand road. My experience has taught me that one can't predict when the breakthrough will happen; one can only provide the opportunity for it to occur.

Last summer I chaperoned a group of young people on a hike through a longleaf forest in the Blackwater River State Park. They talked loudly while I enjoyed an expanse of wiregrass and longleafs. When I crossed a small gurgling stream I paused and let the group catch up.

"We have only a few minutes left of our hike," I explained. "Why don't we do it silently, without any talking. This is an unspoiled environment. There isn't much of it left. Try to notice how you feel here."

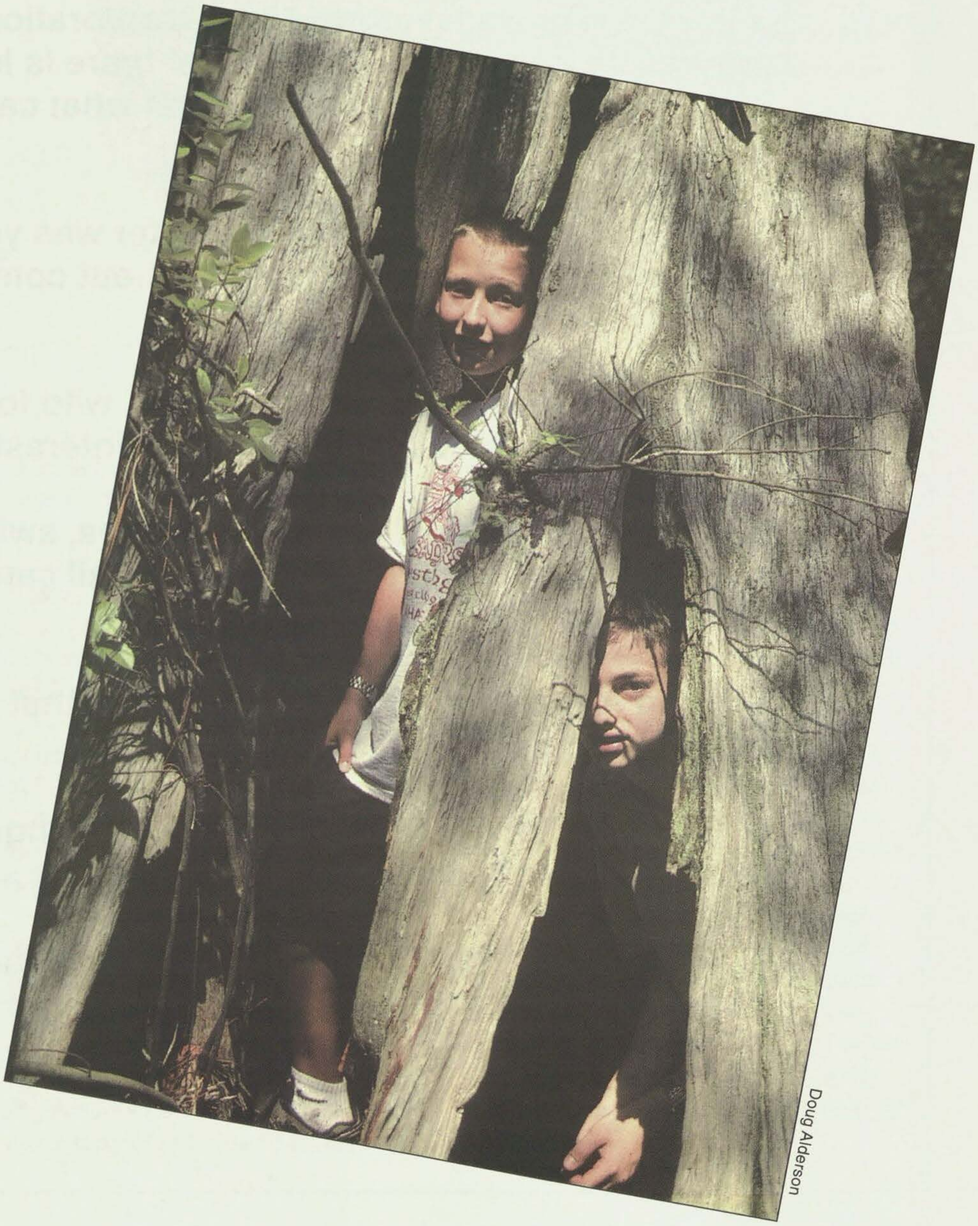
They were agreeable and began pointing out things to each other using sign language. If left alone, I am sure they would have simply continued talking loud like most 12- and 13-year-olds.

I enjoy outings with young people because I often learn from them. Once on a bike outing with my daughter and her friend at the St. Marks Wildlife Refuge, they began naming cabbage palm trees that grew along the marsh. They determined who was the father, mother, sisters and brothers. "Look, see, that one's smaller and leaning against that big one, so that's the little brother," said my daughter's friend.

I had never seen this done with trees. It helped me to view my surroundings in a whole new way, showing again that sharing Wild Florida with young people is not a one-way experience.

If done properly, outings with young people can be like eating s'mores around a campfire; it's something you want to experience more than once.

Doug Alderson is an environmental educator who lives near Tallahassee.



Doug Alderson

GUIDELINES FOR TAKING YOUNG 'UNS TO WILD PLACES

1. Know the age group and be flexible. With younger children it is best to plan “adventures” and “explorations.” But, remember, excursions can be more fulfilling if there is less focus on getting from point A to point B and more on what can be discovered in between.

2. Bring company. When my daughter was younger, I marveled at how she could walk for miles without complaint if an interested friend was along.

3. Bring an expert. An animal tracker, wild food identifier, sportswoman, birder, etc., can spark much interest in young people.

4.Take accessories. Binoculars, scopes, swimming masks, magnifying lenses, cameras, field guides, all can add to the quality of an outing

5. Bring snacks and drinks. Take treats that are not normally eaten at home.

6. Take your time. Children are naturally inquisitive. That curiosity alone can often lead an outing.

7. Include the arts. Combine the outing with activities such as painting, drawing, poetry, photography and storytelling.

Wildlife Friend: Angie Williams

By James Call

akulla County
he Natural Place To Be

Angie Williams found her place. She is able to combine her passion for education, the environment and community in Wakulla County. The middle school teacher views her rural county south of Tallahassee as one large outdoor classroom presenting unique opportunities for her students to explore a variety of ecosystems and habitats.

"We live in such an environmentally fragile county," said Williams, who has taught for 17 years. "The environment is rich here. It's where the kids are living. I just take advantage of my location."

Williams teaches life sciences and has found remarkable success. Her enthusiasm for teaching about the natural world makes her a popular teacher in the rural county. Her approach is to give students the traditional classroom instruction and then make the subject real to them, bring it to life by taking the class outdoors.

Wakulla County lends itself to this approach. It sits atop the aquifer and has a plethora of sinkholes and springs. Five rivers and numerous streams flow through the county. Wakulla Springs is among the deepest freshwater springs in the world. And the county is home to part of the Apalachicola National Forest and the St. Marks National Wildlife Refuge. Williams' students live close to natural wonders and a real life example is never far from memory or the classroom.

And now she is able to add development to the equation. A national forest will keep most of the county rural, but it is part of the Tallahassee metro area, and as the Capital City grows, people move to Wakulla County. Its location on the Gulf makes it attractive to entrepreneurs and tourists. In the past decade Wakulla County's population grew by 35 percent to 19,179. This enables an innovative science teacher to construct class plans that explore the difficulty in balancing growth with respect for the environment.

"You have to present multiple perspectives to be effective," said Williams. "A good teacher gives the kids the information and knowledge they need to understand all the stakeholders involved."

One approach is to simulate county commission meetings where students play all the roles, research the issue from a land planner's position, a developer's, a land owner's and a politician's. The students wrestle with the same issues that policy makers and citizens across Florida do all the time.

"This gives them the knowledge to see the world around them, "said Williams. "It's a way for them to see how decisions they make will affect their lives."

And then there are field trips to a sinkhole in the forest, to the coast or to Wakulla Springs where a Tarzan movie was once filmed.

"They see things they never noticed before because they never knew it existed," explained Williams. "I like to quote a proverb: The more I learn the more I see. The more I see the more I want to learn."

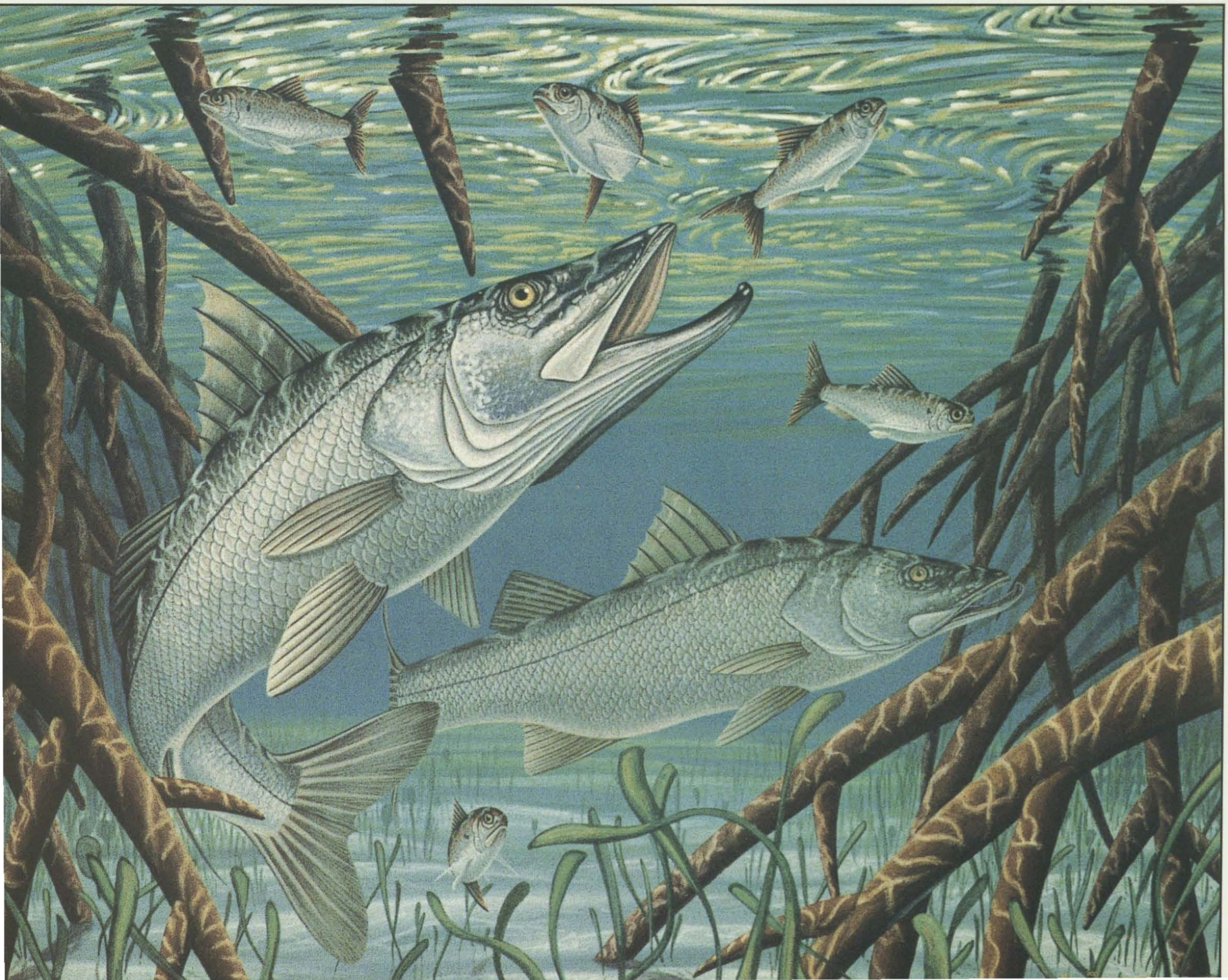
The University of North Florida and Florida State University graduate has learned an effective way to teach. She was one of five finalists to compete for the 2001 Florida Teacher of the Year Award, the first Wakulla County teacher to make it to the final round.

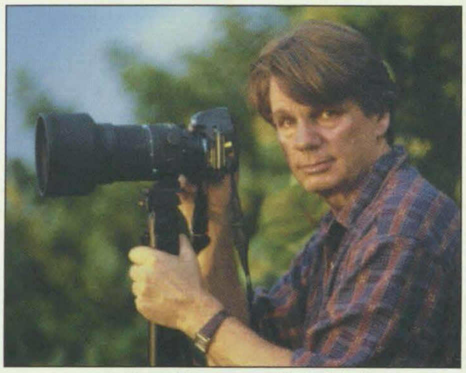
Florida Wildlife
ART CONTEST

The *Great Blue Heron* painting by Gregory Biolchini is the first place winner of the *Florida Wildlife* 2001 Art Contest. (See cover and opposite page.) Biolchini begins his compositions with charcoal drawings. He then uses a camera with a 300mm telephoto lens on beaches, piers, swamps and in open areas to capture wildlife. He carefully puts together his compositions based on a large variety of enlarged photos of wildlife and habitat. *Great Blue Heron* is Biolchini's first acrylic painting. Biolchini's *Snowy Egret* also won an honorable mention (see page 19). The celebrated Bonita Springs artist has his own art studio in downtown Fort Myers. The *Great Blue Heron* print is available for a three-year subscription to *Florida Wildlife* magazine (see insert).

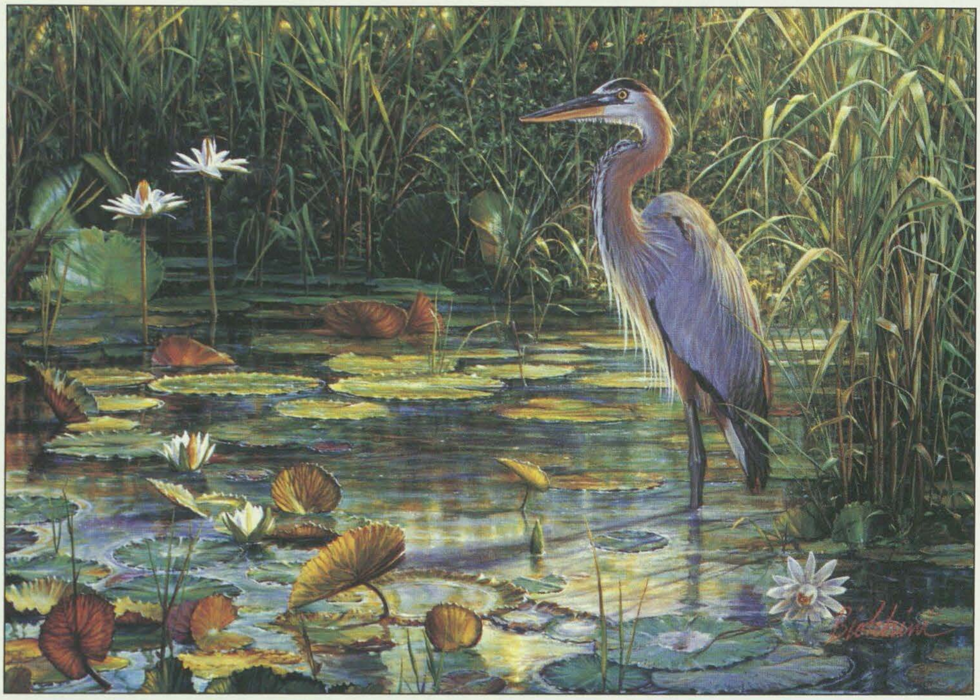
Enjoy natural Florida as interpreted by second place winner *Mangrove Hunters* – snook by D. Eric Buckingham (below), third place *Gentle Wanderer* – manatee by Tom Krause (page 18), honorable mention *Young Alligator* (page 17) and *Red-bellied Woodpecker* (page 19) both by Stephen Koury and *Young Panthers* by last year's first place winner, Pat Tadena.

Visit our Web site for contest rules and deadline for the *Florida Wildlife* 2002 Art Contest, **www.floridawildlifemagazine.com**.



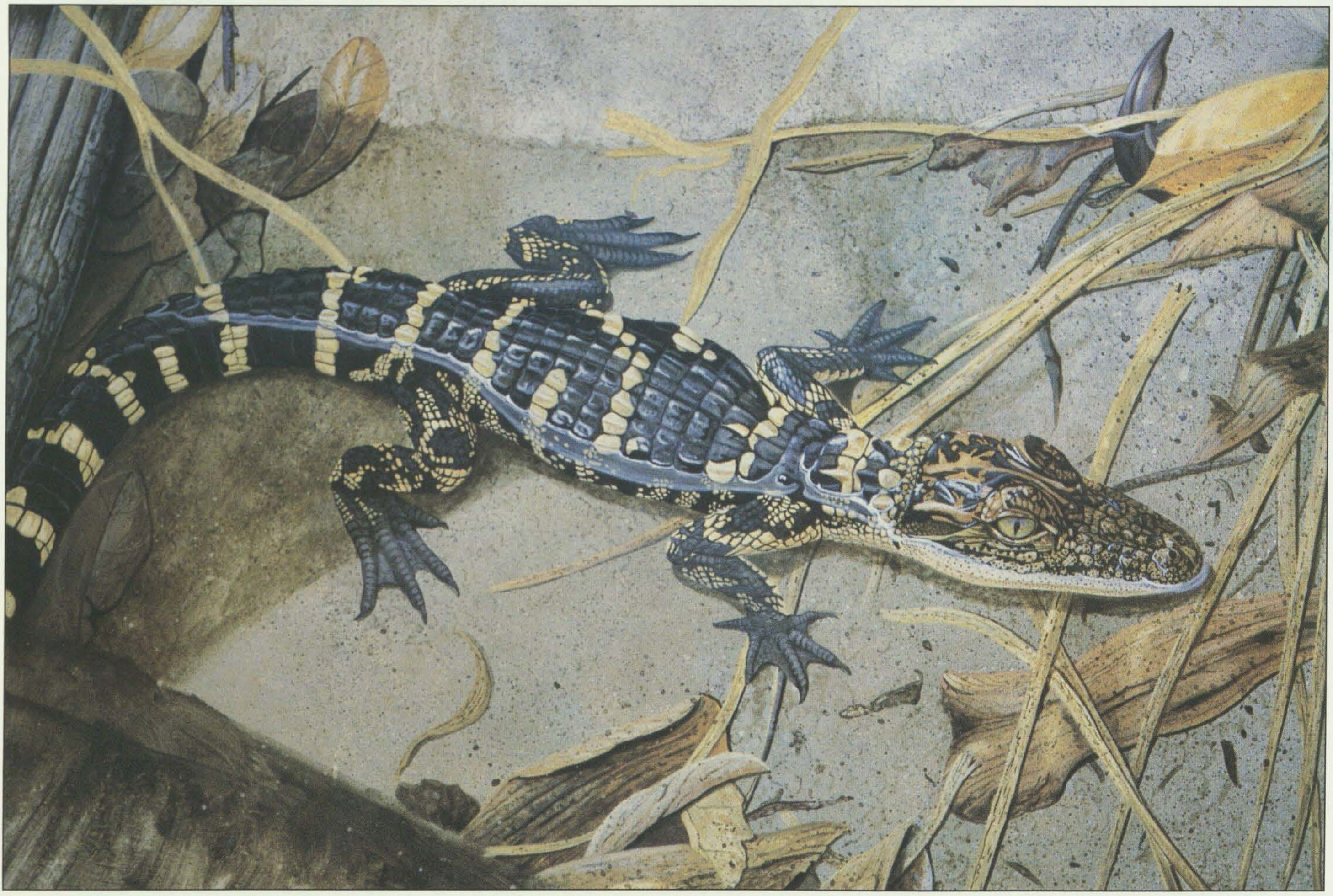


Artist, Gregory Biolchini

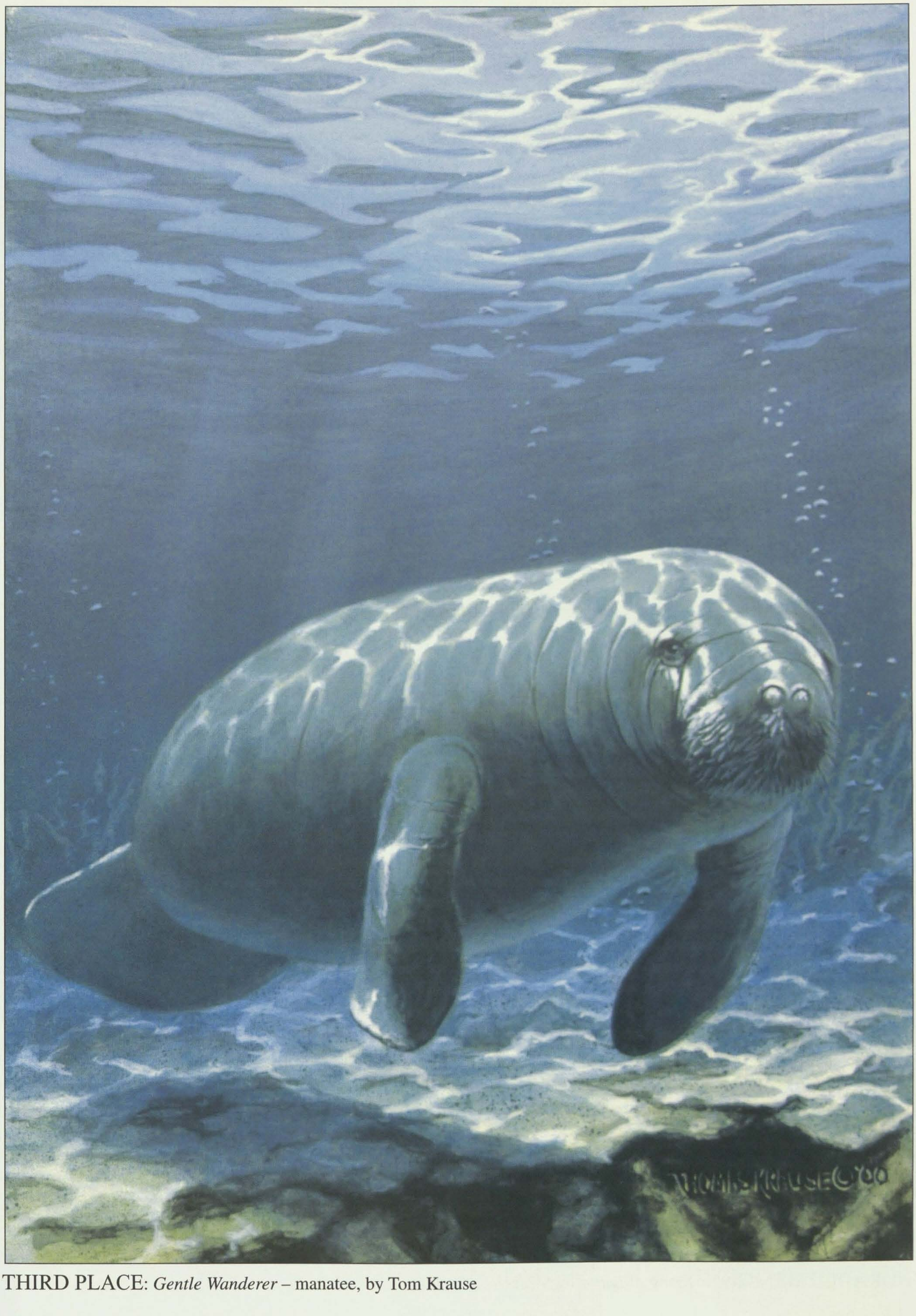


FIRST PLACE
Great Blue Heron
by Gregory Biolchini, right
(Featured on cover)

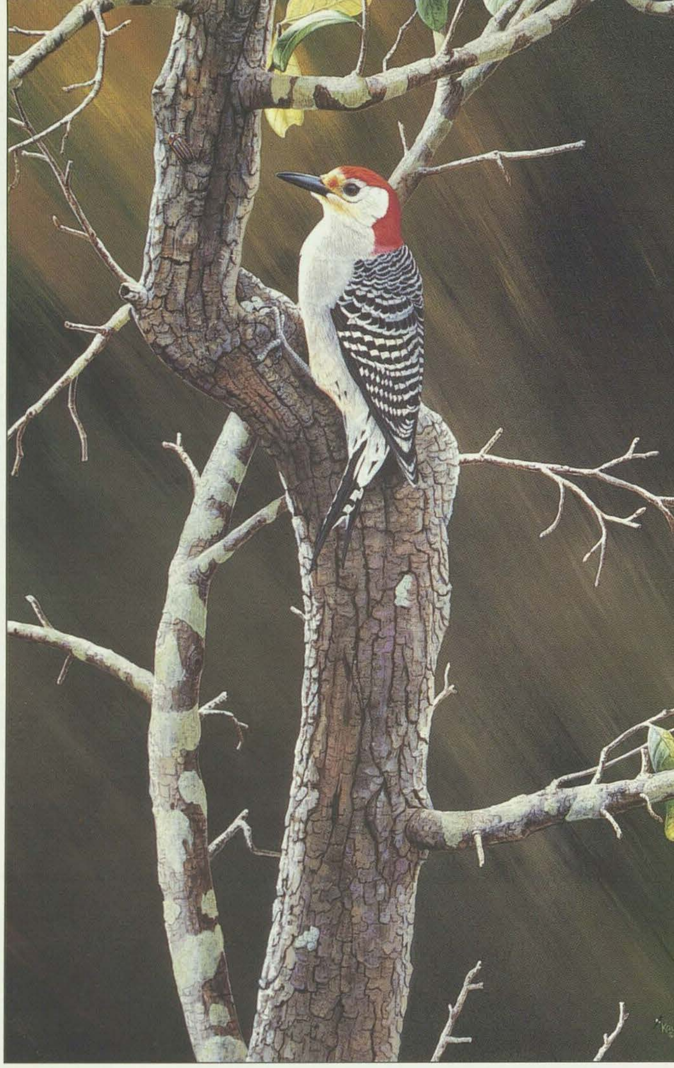
SECOND PLACE
Mangrove Hunters – snook
by D. Eric Buckingham, page 16



HONORABLE MENTION: *Young Alligator* by Stephen Koury ▷



THIRD PLACE: *Gentle Wanderer* – manatee, by Tom Krause



HONORABLE MENTION*: Snowy Egret* by Gregory Biolchini

HONORABLE MENTION: *Red-bellied Woodpecker* by Stephen Koury, right

HONORABLE MENTION: *Young Panthers* by Pat Tadena, below

MERRITT'S Millpond

Text and Photographs by Michael Wisenbaker

The 202-acre millpond stretches for about 4.25 miles at an average width of less than 400 feet.

On a cool April day, a stiff northerly wind bit into our bodies like a starving wolf. Doug Lewis and I were floating over the filmy, green waters of Merritt's Millpond, east of Marianna, in quest of an atypical cave. We had received conflicting reports on how to reach it, so we poked along the banks of the pond looking for the cave's well-masked portal. Heavy diving gear and photo equipment weighed down our craft, occasionally causing us to bang into snags and logs. Although we grumbled about this, we continued to paddle among the bald cypresses decked with fresh foliage.

The millpond originates from several artesian springs. The main one, Jackson Blue Springs, churns out an average of 130 million gallons of freshwater a day. Seventeenth century Spaniards called the spring Calistoble. It once was known as Big Spring of the Chipola. Caroline Lee Hentz dubbed it the Long Moss Spring and used it as the setting for her 1852 romance novel *Marcus Warland*. Other springs: Shangri-La, Twin Caves, Hole-in-the-Wall and Gator pour into the millpond. Several still lesser springs flow from the pond's sandy bottom or through cracks in its floor. The 202-acre millpond stretches for about 4.25 miles at an average width of less than 400 feet. The pond feeds Spring Creek, which snakes for almost two miles before merging with the Chipola River.

The area around the millpond has been continuously occupied by humans for about 12,000 years. We know this based on the artifacts recovered and historical accounts of the region. European settlers marveled at the area's curious caves, vanishing streams, sparkling springs and rich soil. In the 1800s, dams on the creek created the energy needed to spin several grist mills. One was sited just below Blue Springs, another about midway down the pond and yet another near the current dam. In 1871, James Coker, who owned a mill at the headspring, filed suit against Erthington J. Merritt when a dam Merritt built caused water to flood Coker's property. Merritt's dam remained and was used for a grist mill and ice plant until the 1940s.

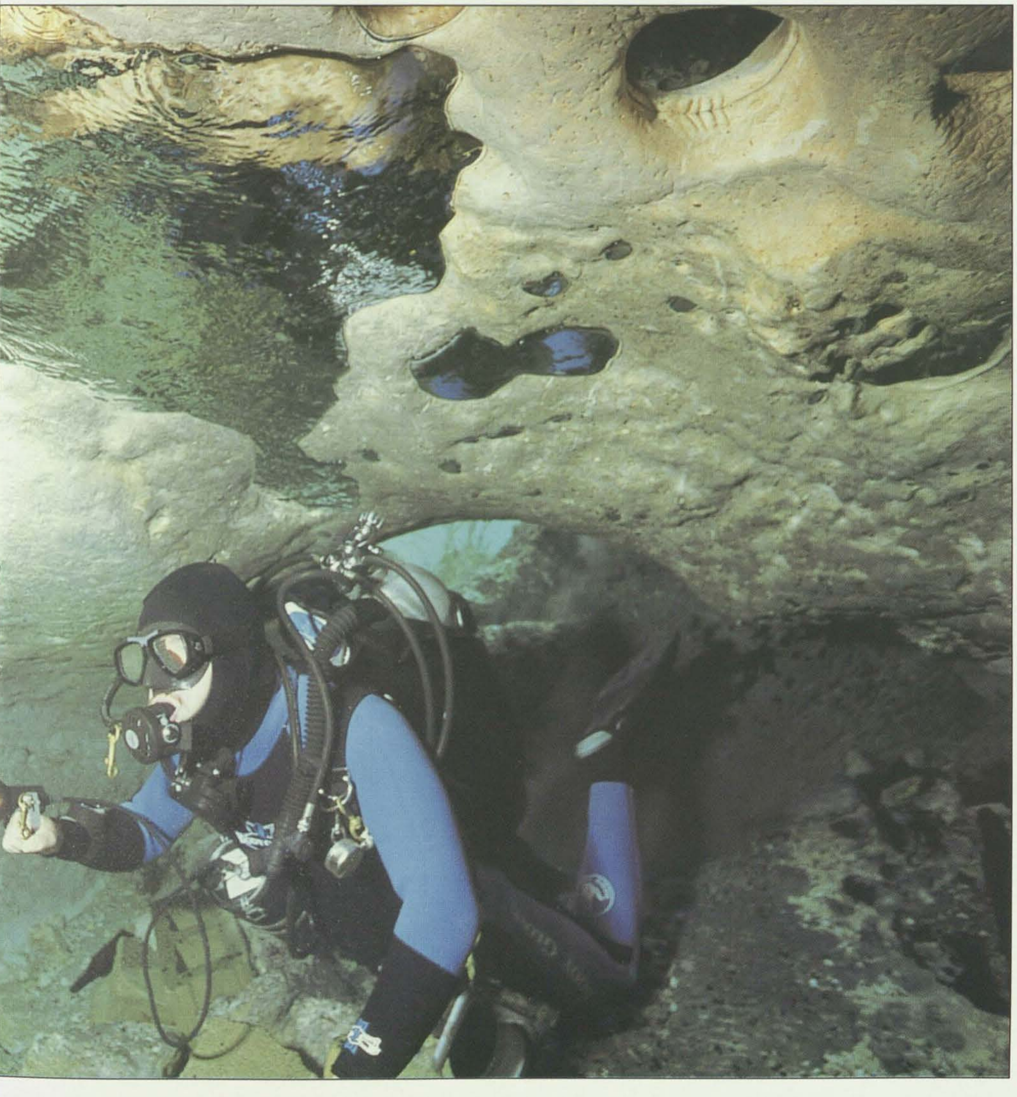
Doug and I finally spotted an opening that resembled a Gothic arch etched into a rocky bluff on the south side of the millpond. We guided the canoe 75 feet or so to the side of the entrance. We secured the craft to a tree, stepped out of the boat into an aromatic muck and excitedly geared up. I put together my amphibious camera and strobe and then we slogged toward the mouth of the cavern. With our heads just above water, we inched into the cave's dark zone. It baffled us to see thick mats of duckweed and massive clumps of eelgrass beyond the twilight zone. How could these plants survive without any sunlight?

As we rounded a bend and the cavern's roof grew larger, Doug suddenly shrieked, "bats!" It seemed odd to hear these creatures' high pitch squeaks and see them bolting around the grotto. Apparently our electronic torches and flashing strobe had upset them. Doug eyed a cluster of them clinging to the ceiling. We also noted colorful guano "pictographs" on some of the walls. For health's sake, we breathed from our regulators rather than inhale the dank air.

We then submerged to inspect the bottom half of the cave. Doug carefully tied the line on his reel to a crease in a

A spring vent, indicated by the indigo waters, beckons with oak leaf hydrangea waving in the background.

A diver enters a domed room with a mirrored ceiling created by exhalations.



rock. We sank again among several wayward sunfish. Doug pointed out some tiny amphipods hovering in the water column. Unfortunately, the water had become milky, so we surfaced to survey a few more dry nooks and crannies. We spotted graffiti written in cursive script and with a date of 1858 carved into the wall. Upon exiting the cave, a nimble bat strafed just above the surface and raised up a millisecond before hitting me in the face. Even for a seasoned cave diver, dry caves can sometimes be an eerie experience.

Although divers have frequented the millpond for more than a quarter of century, it is probably best known for its fishing, especially for redear sunfish. More commonly known as "shellcrackers" because of their appetite for snails, Merritt's Millpond produces many redears. These have included the state record fish landed in 1986, which weighed 4.86 pounds and measured 17.5 inches long. In 1998, the Florida Fish and Wildlife Conservation Commission adopted special regulations in the millpond that allow you only to keep redears 14 or more inches long and permitting you to bag no more than five fish per day. The FWC, along with Jackson County and the Northwest Florida Water Management District, also have classified the pond as a fish management area. This involves periodic drawdowns and the use of chemical and biological controls. The latter include grass carp put into the pond to help keep hydrilla in check. Fish attractors also have been placed there.

Bluegills and largemouth bass also occur at Merritt's Millpond. The former take baits similar to those used to entice shellcrackers, as well as catalpa worms (a larva of a species of moth that feeds on catalpa trees). Most successful bass fishers here use live shiners and plastic worms on light tackle.

A bit of angling lore at Merritt's Millpond originated from a man named Junior Croft, who once managed a boat landing and bait shop there. In 1949 Croft, a serious fisherman and talented woodworker, and a friend began making lures for a business they named the "Blue ▷

Spring Bait Manufacturing Company." They custom crafted each plug. The first one they produced, called the "Humpty-Dumpty," consisted of a three-piece jointed body with an aluminum diving plate. They made only a limited number of lures. Croft sold his interest in the short-lived company in 1953.

Although interested in the history of the area, Doug and I had come to the millpond to savor its caves sculpted in Marianna limestone, which formed from ancient seas some 34 to 37 million years ago. After our trek into bat world, we began paddling toward the headspring with fish scooting around below us and birds soaring above. I caught a glimpse of a male yellow warbler perched in a red maple, glanced at a kingfisher noisily skimming over the pond's surface and heard ospreys chirping overhead. We drifted over a magnificent boil called Hole-in-the-Wall. It lies pondward of an impressive limestone bluff along the south bank. A similar precipice occurs underwater from where the spring emerges. Hole-in-the-Wall's cave soon leads into a claustrophobic, silt-filled tunnel, where if you go far enough back you will encounter soda straws. These delicate, hollow stalactites form only in dry caves. This and nearby springs also play host to rare and endangered animals such as the Georgia blind salamander, Dougherty Plain cave crayfish and Hobb's cave isopod. All of these live exclusively in aquatic caves.

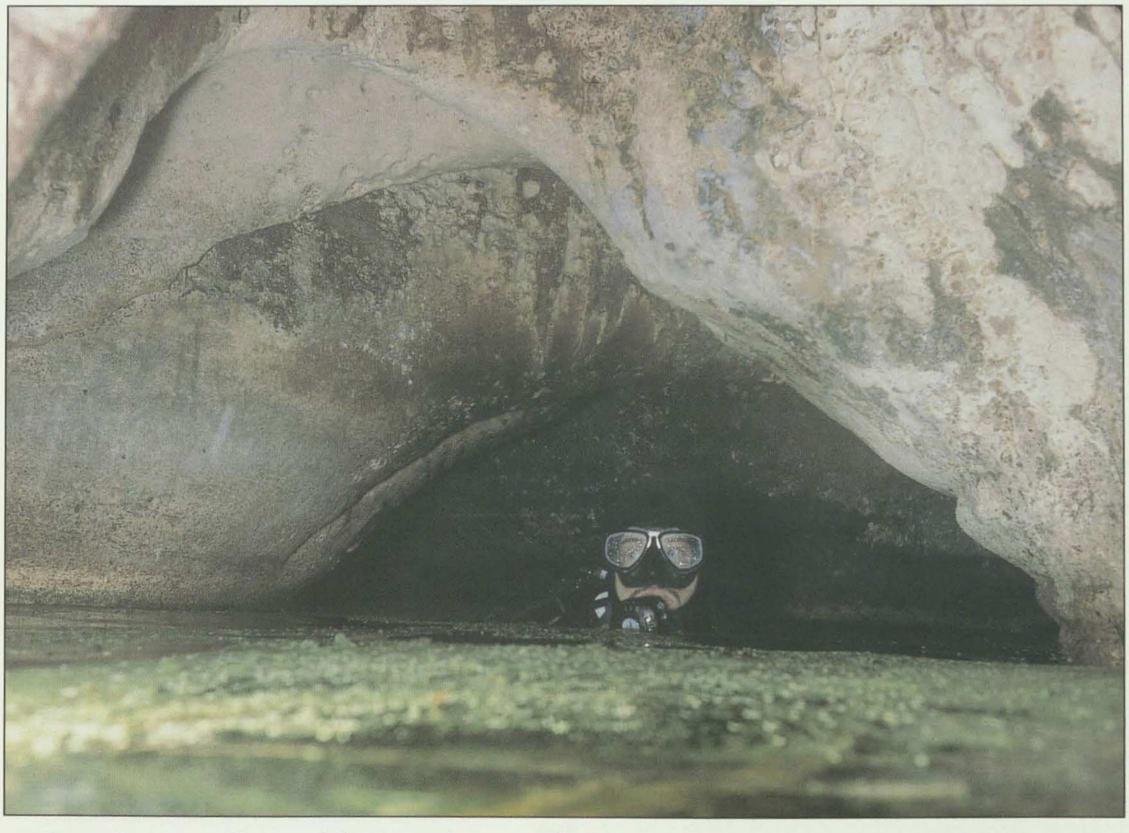
We continued cruising over the pond. Some places along its banks are low and swampy, marked by clusters of gums, cypresses, red maples and sweetbays. Higher fringes around the pond boast impressive stone outcrops and overhangs, which sustain an intricate array of life forms. Algae, mosses, liverworts, Venus-hair ferns, royal ferns, blue phlox, spleenworts, wood sorrel and oak-leaf hydrangea grace steeper slopes. The fertile clay soils near calcareous inclines also bear rare plants such as Marianna columbines and showy ones such as Atamasco lilies.

We briefly floated over Twin Caves, mantled beneath the surface of the pond, before digging our paddles toward a tiny spring vent veiled beneath a limestone cliff on the opposite bank. We then hustled into our dive gear again. After penetrating the fount's minute mouth, we found a moderate-sized chamber. Here we began photographing its passages. Most of its tunnels, however, narrowed to the point where you would have to remove your scuba tank and push it ahead of you if you wanted to proceed. So we left the cavern and swam toward a stone boulder in the pond that resembled a giant mushroom draped with aquatic plants. This object served as a shade umbrella for sunfish, including bass, which darted away from us as if we were the ultimate predators.

We emerged from the dive, boarded our craft and gazed at Jackson Blue Springs, a short distance away. The State of Florida owns the area around the spring, which is managed by Jackson County. Open to the public from Memorial Day until Labor Day, you may swim, snorkel, picnic or just hang out. Certified cave divers may dive the spring during the remainder of the year. They must report at the county sheriff's office, however, to register and pay a user fee before diving. The spring's labyrinths have been explored 4,000 feet back from its entrance. In the future, the county plans to open the park year round and to expand recreational uses at Jackson Blue Springs to include canoeing, tubing, wildlife viewing, hiking and primitive camping. The county also manages 21 acres at the other end of the millpond below the dam. This site offers a place for you to launch canoes, kayaks and tubes. From there you can begin an incredible journey down Spring Creek and the scenic Chipola River.

Upon our return to the boat landing, it struck me that Merritt's Millpond seems like a bland name for such an enchanting place. The same can be said of the all too common tag of Blue Springs. Although this region of our state has attracted people since the dawn of humanity in the Americas, it continues to instruct us on the workings of nature. It's a place to sample a part of Florida that few ever learn to appreciate and to enjoy.

Michael Wisenbaker of Tallahassee is a frequent contributor to Florida Wildlife.



Doug Lewis reaches a cul de sac in this partially dry cave.

Saving Sea Turtles in St. Joseph Bay

FMRI

By Allen Foley

The scene in the tank at Gulf World was incredible. There were at least 300 green turtles and a dozen or so Kemp's ridleys and loggerheads. Only a few days before, these sea turtles lay dying along the southern shore of St. Joseph Bay in Gulf County, suffering from the effects of an unusually long period of cold weather. Now, thanks to the efforts of a diverse group of people, the turtles were recovering.

It began on New Year's Eve when the Allocco family, vacationing from Indiana, found a sea turtle floating motionless in the shallow water behind the cabin they were renting on the southern shore of St. Joseph Bay. It was a green turtle, about the size of a dinner plate. The cold water had essentially stunned it. When sea turtles are exposed to water temperatures less than 45°F, they become inactive and float at the surface. Cold-stunned turtles become easy targets for predators and scavengers, and prolonged exposure to cold water increases susceptibility to disease and eventually leads to death.

The Alloccos notified Lanny and Rachael Blair (owners of the rental cabins), who called in personnel from St. Joseph Peninsula State Park and the Gulf County Turtle Patrol. Together, they found six more cold-stunned sea turtles that day. Gulf World, a marine zoological park about an hour and a half away in Panama City Beach agreed to hold the turtles in their heated saltwater tanks.

Seventeen more sea turtles were rescued that day and taken to Gulf World.

On Tuesday, the rescue effort intensified as Tammy Summers, of the Apalachicola National Estuarine Research Reserve, arrived with a boat and staff to search an even larger area of the bay. By the end of the day, 132 more turtles were found. The U.S. Fish and Wildlife Service office in Panama City took the turtles to Gulf World.

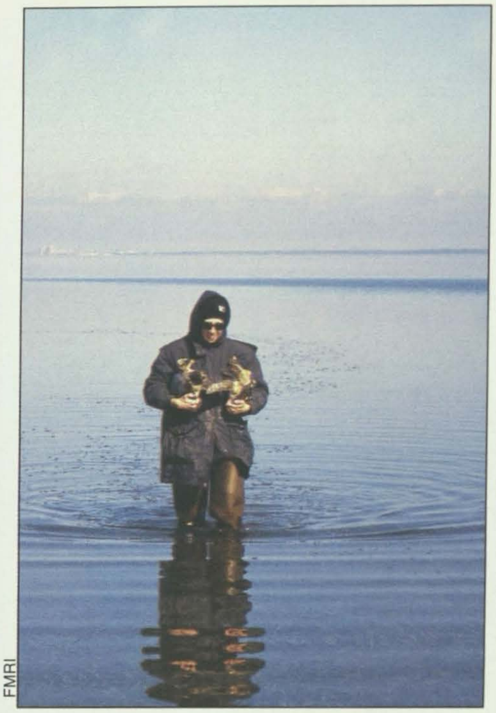
We (the four sea turtle stranding staff of the Florida Marine Research Institute) arrived on Wednesday afternoon, just in time to transport a truckload of cold-stunned turtles to Gulf World. Another 139 turtles had been found, bringing the three-day total to 278.

Our first priority was to transfer the turtles in need of care (beyond simple warming) to other rehabilitation facilities. For example, one Kemp's ridley had ▷

monofilament fishing line wrapped tightly around both front flippers, and this had caused deep gashes and had impeded blood circulation to the flippers. One of the green turtles had ingested monofilament fishing line, a portion of it protruding from the turtle's cloaca. Some of the turtles had eye infections, some had cloacal infections, and others continued to float at the surface even after having adequate time to warm up in the tank at Gulf World (a possible sign of pneumonia or other serious problems). We carefully observed the behavior and appearance of the turtles recovering at Gulf World and identified 36 that needed more care. The Gulfarium, a few hours away in Ft. Walton Beach, picked up three of these turtles while we transported the rest to one of five rehabilitation facilities in Florida.

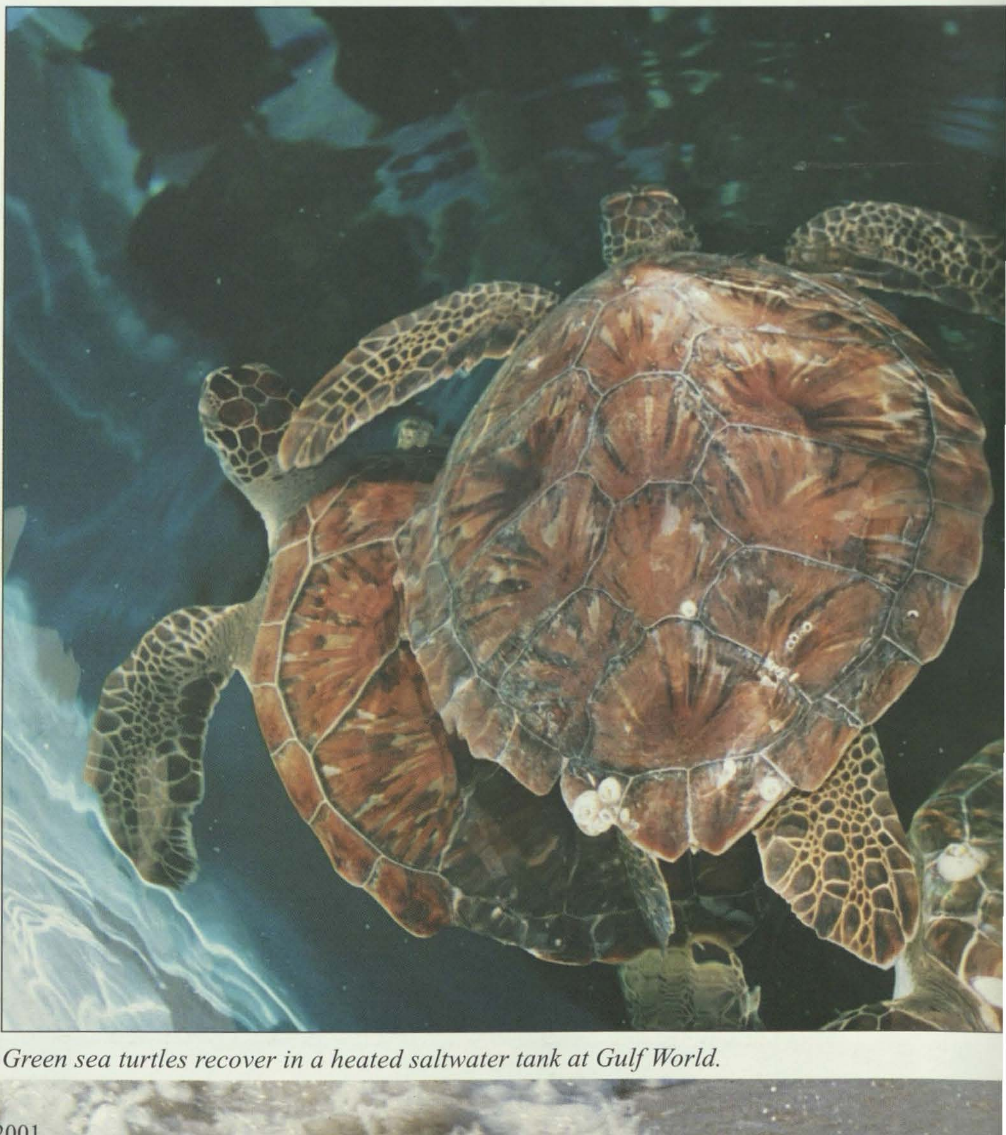
Then we convened a panel composed of our staff, veterinarians and aquarists from Sea World of Florida, and scientists from the National Marine Fisheries Service and the University of Florida and decided that all of the turtles that appeared healthy and showed no effects of cold-stunning should be released into the Gulf of Mexico just south of St. Joseph Bay. We suspected that the sea turtles living in the shallow waters around northern Florida typically moved into deeper, warmer waters during the coldest times of the year and returned to shallow waters when the coldest weather passed. The severe weather that preceded the cold-stunning event probably lowered the water temperature of the bay so rapidly that the turtles did not have enough time to escape to the Gulf of Mexico (especially since the bay is open only at its very northern end). Given the navigational abilities of sea turtles, we were confident that they would be able to return to St. Joseph Bay when the water warmed.

Before releasing the turtles, we wanted to take advantage of this unique opportunity to learn more about them. During the course of normal research activities, it probably would have taken us many years to capture this many sea turtles and no one had yet studied the sea turtle populations living in the Florida Panhandle. We wanted to carefully examine and photograph each turtle to document any signs of injury, disease or other abnormalities; to weigh and measure each one; to take blood and skin samples; and to tag each one with external flipper tags and very small injectable tags that could be read by a scanner (the same tags used to identify pets).


FMRI

Tammy Summers brings in cold-stunned green sea turtles found floating in St. Joseph Bay.

Appreciative as we were of this great chance to learn more about Florida's turtles, we also knew that we had a lot of work to do and little time to do it in. These turtles were very crowded in their temporary home at Gulf World and would soon start biting each other. We had to get them back into the wild as soon as possible. We set up four stations at which information was collected and the turtles were tagged. During five very busy days and nights, we tagged all the turtles and simultaneously organized and conducted the releases. By Tuesday, January 9, we had tagged and released 297 turtles. Nine more of the later-arriving turtles were


Green sea turtles recover in a heated saltwater tank at Gulf World.

studied and tagged after that and released on January 16.

Unfortunately, 61 turtles died because of cold-stunning. Nevertheless, these 61 turtles still provided us with important information. For two days we conducted necropsies (autopsies) on turtles to learn how the cold weather had affected them and whether they appeared to have been suffering from any disease. We collected the entire gut from each turtle to study their diet and to look for marine debris. We were also able to determine the ratio of males to females among the dead turtles (we wouldn't have known the sex of these immature turtles without looking internally), which gave us an indication of the sex ratio of the living turtles.

Overall, we ended up finding 403 cold-stunned sea turtles. Thanks to the efforts of all the people involved, 342 survived. Of these 342 turtles, 306 were released by January 16, and the 36 turtles that were more seriously affected by the cold stunning were transported to various facilities around Florida for longer-term rehabilitation. As of March 15, 26 of the turtles that went to rehabilitation facilities had also been released.

Shirley J. Brown

Most (389) of the sea turtles that were rescued during those two weeks were green turtles; ten Kemp's ridleys and four loggerheads rounded out the group. Because their numbers have dwindled severely, the green turtle and the Kemp's ridley are listed under the U.S. Endangered Species Act as endangered and the loggerhead is listed as threatened. The status of these animals underscored the importance of saving as many as possible. With only one egg in a thousand likely producing a turtle that survives the first few years of life, the 342 turtles that were saved represented the product of well over a quarter of a million eggs.

The cold-stunning provided a valuable glimpse of a little-known population of sea turtles. Based on their sizes (5-120 lbs; 10-30 inches in shell length), we learned that all the sea turtles found during the cold-stunning event were immature. This shows that St. Joseph Bay serves as an important nursery ground or developmental habitat for these turtles. They probably spend many years in St. Joseph Bay but leave before they mature. Recaptures of the tagged turtles will tell us about how long they live in St. Joseph Bay and about their travels when they leave. These recaptures will also provide information on growth rates. The blood and skin samples that were taken from each turtle will reveal genetic identities that can be linked to the particular nesting populations that produced them.

What was learned about the sea turtles through this cold-stunning event may even eventually save other sea turtles living in the Florida Panhandle. For example, the documented presence of numerous sea turtles may increase efforts to protect and preserve sea turtle habitat in St. Joseph Bay and in similar bays nearby.

Shirley J. Brown

Karrie Singel and Tony Redlow (FWC) tag a green turtle while Tammy Summers watches.

The heroic effort to rescue, study and release the cold-stunned turtles in St. Joseph Bay was coordinated by our stranding staff (Jennifer Blackwelder, Tony Redlow, Karrie Singel and me) and involved two other state agencies (Florida Department of Environmental Protection and Florida Park Service), three federal agencies (National Marine Fisheries Service, National Park Service, and U.S. Fish and Wildlife Service), seven private aquaria (Clearwater Marine Aquarium, EPCOT's Living Seas, Florida Aquarium, Gulfarium, Gulf World, Mote Marine Laboratory and Sea World of Florida), four private conservation organizations (Gulf County Turtle Patrol, St. Andrew Bay Resource Management Association, St. Joe Wildlife Sanctuary and South Walton Turtle Watch Group) and a legion of private citizens. Fortunately, this type of incredible coalition is characteristic of the unique and effective way that live sea turtles are rescued and rehabilitated and the way that sea turtle mortality is documented throughout Florida all year round. We are very lucky in Florida to have so many people from all walks of life who gladly work hard to ensure a future for Florida's sea turtles.

Allen Foley, Assistant Research Scientist, FWC's Florida Marine Research Institute, writes from St. Petersburg.

Florida Keys Falcons

Text and Photographs by Beth Davidow

More than a thousand people visited Curry Hammock to watch the raptors and their counters.

"Peregrine falcon heading over the third pole." "Another peregrine over the green channel marker." "Kestrel over the palm tree." Observers sang out the location of incoming raptors flying south over Grassy Key on a clear October morning. Derek Lovitch, a hawk watcher from New Jersey, helped visitors identify the birds on the wing. "Look at its size. The body is pretty stocky and its wings are long tapered. Through binoculars you can see the black hood on its face." A half dozen pairs of binoculars follow the falcon's flight as the bird flapped its way south.

Raptor migration is not the first thing people think of when the Florida Keys are mentioned. However, over the past few years, the Keys have become a premier site to observe peregrine falcon migration and other raptor species. The site has become so popular that the Florida Fish and Wildlife Conservation Commission hosts the annual Florida Keys Birding and Wildlife Festival at Curry Hammock State Park during the height of the migration. HawkWatch International established a count site at the park in 1998.

"This site is perfect for us," said Casey Lott, director of the Florida Keys Raptor Migration Project (FKRMP). The 1999 count tallied more than 23,000 birds and last year observers spotted 39,000 birds. "We're right in the narrowest part of the middle Keys, the observation deck on the bathhouse has a great view of the flight paths of migrants both to the north and south, and there's plenty of space for visitors," said Casey. Between mid-September and the end of October of 2000, more than a thousand people visited Curry Hammock to watch the raptors and their counters.

"Where do all the raptors come from?" asked Casey rhetorically. "They come from all the wild habitats of North America east of the Rockies. Representatives of thousands and thousands of wilderness acres fly by us here in the Keys." In 1998, two peregrine falcons were caught and both bore leg bands that indicated they had been nestlings in Alaska. "One came from the Colville River on Alaska's North Slope, the other from the Tanana River near Denali Park."

Various raptors appear in waves as the count season progresses. Merlins, kestrels and osprey tend to be early arrivals. "It's not unusual to see six merlins at a time flying past this spot," said Derek Lovitch. "There's even one kestrel who spends her winter here." Broadwings, Cooper's and sharp-shinned hawks, and northern harriers are among the raptors heading south. Lovitch said that one of the positive features of the Curry Hammock site is that "we can see what direction the birds are heading so we record that information along with the species observed."

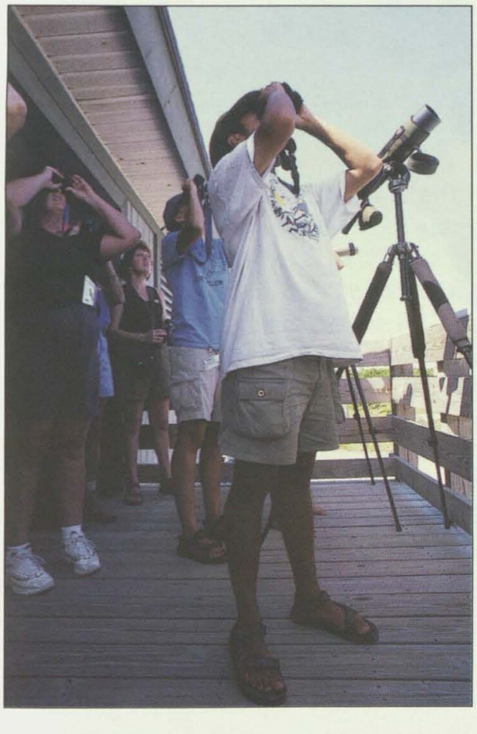
The 2000 Florida Keys Raptor Migration Project came to a close in late November with a final count of 39,349 birds. Peregrine falcons accounted for 2,043 of the total. Designed as a long-term project to monitor population trends for peregrine falcons after their removal from the endangered species list, while also monitoring trends for nine other raptor species, the FKRMP continues its annual watch at Curry Hammock State Park. "There's still a lot of mystery to this flyway," said Casey Lott. "With the consistent location to observe the migration in the Keys, the education and public awareness that goes along with it, and the banding, I think we'll see some amazing things come out of this project in the years to come."

Beth Davidow is a free-lance writer living in Miami.

Page 26: Cooper's hawk

Right: Jon Larrabe releases a female northern harrier.

Below: Derek Lovitch counts hawks, left. Peregrine falcon, right



The Florida Keys Birding & Wildlife Festival

The Florida Keys Raptor Migration Project is located on Grassy Key at Curry Hammock State Park, at mile marker 56 on Highway 1, just north of Marathon, Florida. Look for the yellow "HawkWatch" sign pointing into the park. Drive straight down the main road past the ranger's house and turn right at the "T" intersection. You'll see the bathhouse with the observers on its balcony. Observers can direct you to the observation blind at the banding station. The project runs from September 15-November 13 and visitors are welcome at any time.

The Florida Keys Birding and Wildlife Festival will be held on October 13-14, 2001, also at Curry Hammock. Visit www.hawkwatch.org/keysfest.htm or email birdfest@excite.com. For more information about the Florida Keys Raptor Migration Project, go to www.hawkwatch.org/keysmigration or email keysmigration@hotmail.com or call Lori Haynes at (561) 625-5122.

The American Kestrel

(falco sparverius)

By James Call
Illustration by Lizabeth West

The American kestrel is a noisy bird. It emits high-pitched cries of "klee" in bursts of three to six when nearing a nest, courting or begging for food. It's a typical member of the kestrel family in that it hunts from high perches or hovers when hunting. Its flight is buoyant, graceful and rapid.

The American kestrel has a reddish brown back and tail, and a gray, black and white face pattern with vertical stripes. Kestrels are relative in size (9-12") to an American robin. The American kestrel is the smallest falcon found in North America. Like all members of the genus *Falco*, the Kestrel has a dark eye and notched beak. The outer feathers on the wings of the male kestrel are blue-gray, the female's are reddish-brown.

The kestrel likes to nest in holes in trees and is monogamous. Early in the breeding season, the male hunts for and feeds the female. He continues to feed her through the egg-laying, incubation and hatching periods. The young take their first flight about 30 days after hatching. Once they learn to fly, young birds return to the nest to roost at night for about another two weeks. Life expectancy in the wild is likely to be no more than between two and five years.

The American kestrel is found from Alaska across to Nova Scotia, and south into Mexico and the Caribbean. It prefers open, urban and cultivated areas containing scattered trees or other high perches. The habitat is varied, including forest edges, orchards, pastures and deserts.

The kestrel feeds on a variety of small mammals and birds, reptiles and insects, particularly the grasshopper. In Florida the southeastern subspecies is listed as threatened.

2001-2002
FLORIDA HUNTING SEASONS

Seasons on wildlife management areas may be different.

Season	Northwest	Central	South
Dog Training	Oct. 27-Nov.15	Oct.6-25	Oct. 6-25
Archery	Oct.13-Nov. 11	Sept. 22-Oct.21	Sept. 8-Oct. 7
Muzzleloading	Nov.16-18	Oct. 27-Nov.4	Oct.13-21
General Antlered Deer and Hog	Nov. 22-25 & Dec. 8-Feb. 13	Nov.10-Jan. 20	Oct. 27-Jan. 6
Special Archery and Muzzleloading	Feb.14-24	No season	No season
Fall Turkey	Nov.22-25 & Dec.8-Jan.13	Nov.10-Jan .6	Nov.10-Jan. 6
Quail & Gray Squirrel	Nov.10-March 3	Nov. 10-Mar. 3	Nov. 10-Mar. 3
Spring Turkey	Mar. 16-Apr. 21	Mar. 16-Apr. 21	Mar. 2-Apr. 7
Antlerless Deer	Dec. 15-16	Nov. 17-18	Nov. 3-4

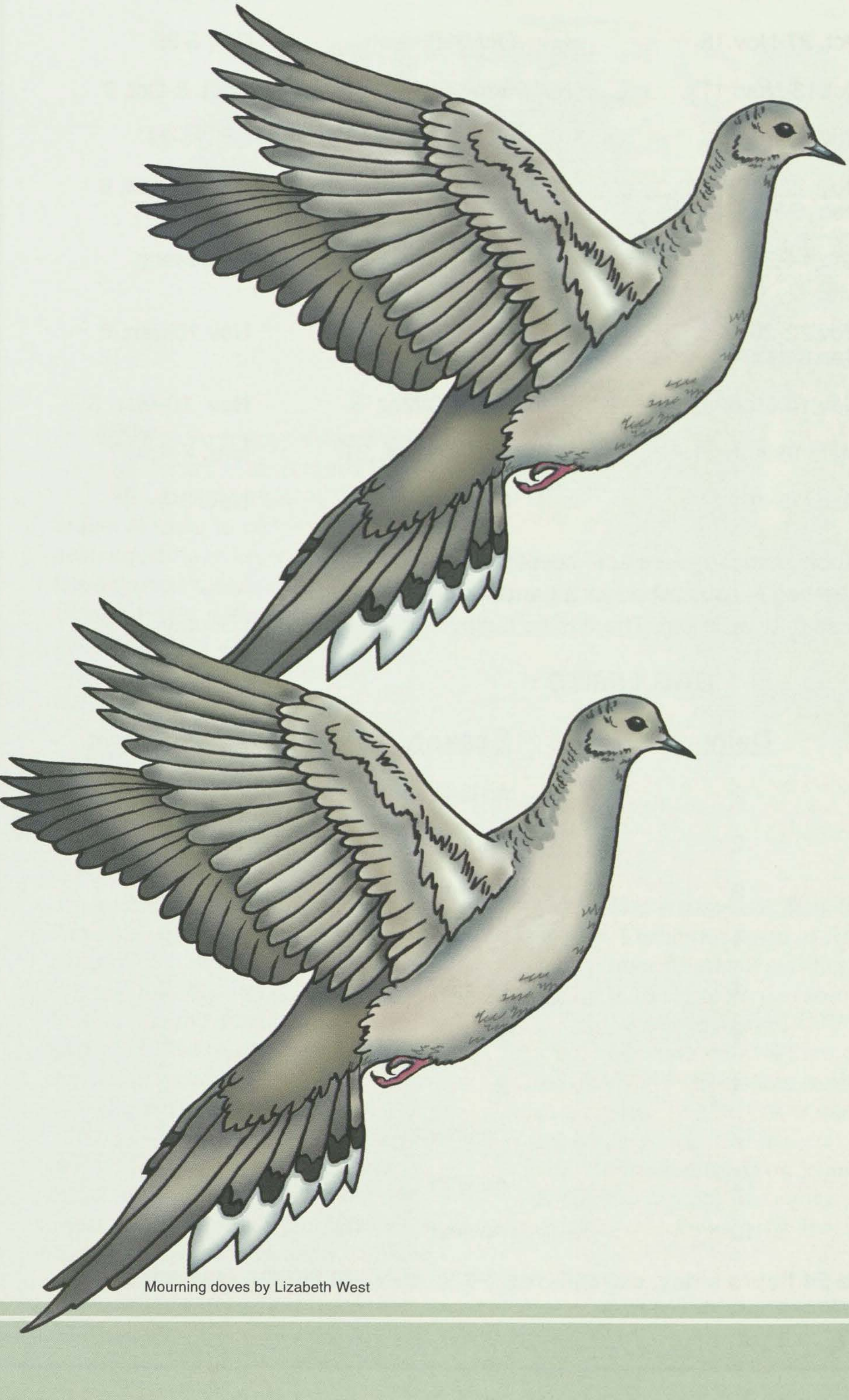
- There is no closed season for rabbit, raccoon, opossum, coyote, skunk and beaver.
- Hog season is in areas only where hog is established as a game animal.
- Only bearded turkeys and gobblers may be taken. There is no turkey hunting in Holmes County.

BAG LIMITS

Game	Daily	Season	Possession
Antlered Deer	2	no limit	4
Antlerless Deer (permit)	2	permit	4
Antlerless Deer (archery)	2	no limit	4
Antlerless Deer (season)	1	2	2
Hog	1	no limit	2
Turkey (fall)	1	2	2
Turkey (spring)	1	2	2
Quail	12	no limit	24
Gray Squirrel	12	no limit	24
Rabbit	12	no limit	24

To purchase a hunting license 24 hours a day, call toll-free 1-888-HUNT-FLORIDA (486-8365) or visit our Web site at: www.floridaconservation.org.

DOVE COOKING



Mourning doves by Lizabeth West

By Duel Christian

The grumblings in my belly are a telltale sign that it's nearly five o'clock. Staring out the office window does nothing to sate my peckish inclinations, but it does give me time to think about what I'm going to eat tonight. To tell the truth, I have no earthly idea. Then I notice several doves fly past my window.

That's it!

A friend of mine had a very successful dove hunting trip a couple of weekends ago and I have some of his bounty chilling in my freezer.

As I continue to follow the dove's flight path, I'm reminded of the hunting trips I used to take with my grandfather. One such trip sticks out in my mind more than others.

It was the fall of 1983, I'm 14 years old, sitting in a field in Perdido, Florida.

This particular field had a large area of scrub and small trees near the center. Our hunting party decided to nestle down among the edges of the shrubbery instead of erecting a blind in the open field. We would be less distinguishable to the doves' eyes this way.

We had all taken up positions facing east. Perdido Bay was only a couple of miles southeast of our position. The doves would be flying from our left to right,

heading South.

I cradled my semi-automatic 12-gage shotgun in my hands. Up until this trip I had been using my father's old single-shot 20-gage that he used when he was a boy. So this would be a new experience for me.

Glancing to my left and right, I could see the other members of our party scanning the skies for doves. Among them were several captains of industry in Pensacola. There was also a circuit court judge as well as a successful restauranteur, as well as my grandfather, Alton Wesley.

"Here they come," said a disembodied voice somewhere to my left.

Adrenaline coursing through my veins, my eyes darted upwards, scanning for signs of our prey.

A flock of about a dozen doves came swooping low to inspect the field for some food.

That's when the firing began. The reports of shotguns exploded all around me. Birds were plummeting to the earth only breaths later. One dove cut low right in front of me. I quickly sighted the bird and squeezed the trigger. The dove immediately fell to the ground.

The remaining doves flew away as we ran into the field to harvest our prey. We quickly took our positions among the brush and waited for the next batch of doves.

Sometime during the day I changed my position a little farther north of the rest of the group. This way I could have a crack at any of the doves that tried to fly behind us. This proved to be a very good move on my part.

Another flock of doves came heading straight for us. They split off into two groups when they reached the scrub. A group of four came diving down low and into my field of fire. They were tightly packed, so I fired two rapid shots and brought down three doves. A third shot brought down the fourth dove only one second later.

A cacophony of congratulatory hoots and hollers rose up from behind me. "Way to shoot boy! We'll make a hunter out of you yet!" My favorite was a jibe at my grandfather, "Look out Alton, he's liable to make a better shot than you pretty soon!"

It was a moment I'll never forget. In the company of men I was a youngster, yet I was one of them. I had won the rite of passage.

ROASTED DOVE IN A WINE GRAVY

Ingredients

4 doves or Cornish hens, cleaned and dressed
1/4 cup chopped garlic
1/2 cup Merlot wine
Several sprigs of fresh thyme and rosemary
1/4 cup chicken bouillon
Flour
Light olive oil
Seasoned salt

To Make:

Rub doves with seasoned salt inside and out

Dredge doves in flour and set aside

Lightly coat skillet with olive oil

Brown doves on all sides in skillet and remove

Deglaze skillet by pouring in 1/4 cup of wine and chicken bouillon

Vigorously stir the wine with a wooden spoon to dislodge the flour stuck on the bottom of the skillet. Let mixture reduce for about two to three minutes

Crush the rosemary and thyme in a mortar and pestle. Rub it all over the outer sides of doves and place remainder inside the birds cavities

Rub chopped garlic over the outer sides of the bird and place a generous amount inside the bird's cavity

Place doves in a covered clay baking dish or a covered ceramic baking dish

Pour wine reduction over bird

Place in a 400 degree preheated oven

Bake for 20 minutes or until juices run clear

Remove doves and set aside.

Transfer baking liquid back to skillet on high heat.

(add more wine and chicken bouillon if necessary)

Add a couple of tbsp. of flour and stir to thicken liquid into gravy

Pour gravy over doves

Serve with collard greens, sauteed asparagus tips and corn bread. The wine should be a Merlot to complement the gravy.

Serves two

Duel Christian writes from Tallahassee.

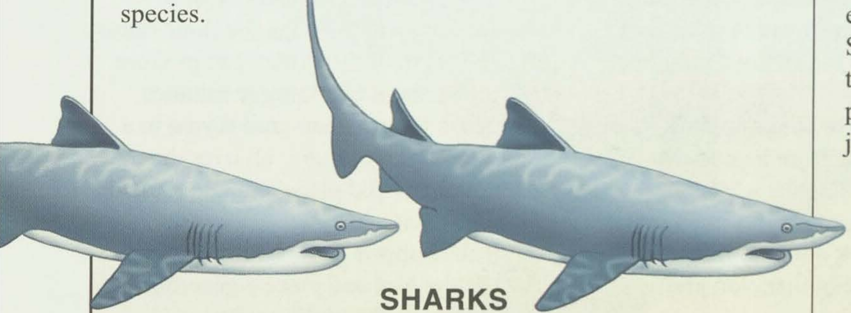
CONSERVATION UPDATE

Compiled by James Call

THE FLORIDA BLACK BEAR

A recent survey of the bear population in the Ocala National Forest indicated some surprising results. "We have about 500 bears in the national forest, and we previously thought there were only about 210 bears in all of central Florida," said Thomas Eason, the Fish and Wildlife Conservation Commission's Bear Management Section leader. The Commission is studying the six core populations of bears in Florida. The project involves gathering fur samples and using DNA to identify individual animals and track sex ratios and numbers.

"When we complete these studies, we will have a sound basis in science for future bear management decisions," Eason said. The Florida black bear is classified as a threatened species.



SHARKS

Shark attacks are rare in Florida waters. According to the International Shark Attack File at the Florida Museum of Natural History there is less chance for a human to be bitten by a shark than stung by a bee or wasp. In fact, one has a better chance of being struck by lightning than being bitten by a shark. A museum spokesman added that almost all shark bites are of the "hit-and-run" variety in which a small to medium-sized shark mistakes a person's hand or foot for a fish and when it realizes it wasn't what it was looking for, it swims away. A serious shark attack is rare.

BEACH REPORT

You can check the health of your local beach online. The Environmental Protection Agency released its annual beach report in August. The report tracks the effects of sewage overflows and stormwater runoff on the nation's beaches. The Beaches Environmental Assessment Closure and Health Report can be viewed at www.epa.gov/ost/beaches.

WETLANDS UPDATE

The Army Corps of Engineers is revamping its wetlands regulations after other federal agencies criticized changes the Corps planned to implement. The EPA objected to plans that would relax channelization and relocation requirements for low-flow streams, permit activities that may degrade wetland and allow the Corps to impose mitigation requirements on a discretionary basis. The Corps is trying to complete its review by December.

William A. Greer

WATERFOWL PRINT

John Nelson Harris of Groveland created the winning entry of a canvasback drake in the 2001-02 Florida Waterfowl Stamp competition. It's the second time in the last three years that Harris produced the winning design. If you would like to purchase a print of the design, Harris can be reached at johnnelsonharris@aol.com or (352) 429-4821.

Florida Fish and Wildlife Conservation Commission Regions

Northwest
Lt. Colonel Louie Roberson, director
3911 Highway 2321
Panama City, 32409
(850) 265-3678

North Central
Lt. Colonel Julie L. Jones, director
Route 7, Box 440
Lake City, 32055
(904) 758-0525

Northeast
Dennis David, director
1239 S.W. 10th Street
Ocala, 34474
(352) 732-1225

Southwest
Lt. Colonel Greg Holder, director
3900 Drane Field Road
Lakeland, 33811
(863) 648-3203

South
Mark Robson, director
8535 Northlake Boulevard
West Palm Beach, 33412
(561) 625-5122

TTD (850) 488-9542

Tiger sharks by Lizabeth West

CONSERVATION UPDATE

Ask The Lieutenant

Mr. Lieutenant:

I am disabled but am not confined to a wheelchair. I got myself a disabled hunting and fishing license and want to hunt in Moore's Pasture. Do I have everything I need?

– LP.

LP,

No, you don't. You must still purchase a Recreational Use permit. The only exemption in the regulation is for a minor child under 16 years of age hunting with an adult who has a permit.

– Lt.

Sir,

I recently moved to Florida and now that I have settled in, I would like a quick review of fishing regulations.

– Newbie

Newbie,

Welcome to the Sunshine State and I'll try to be brief. Non-residents must purchase a license to fish in freshwater and saltwater. A non-resident is anyone who has not lived in the state for six continuous months. Now for residents, it's a little different. You can fish in your county of residence for freshwater fish with a cane pole, and no fishing license is required (this does not apply to fish management areas). If you fish out of your county or use a rod and reel, then a license is required. One can be purchased at the county tax collector's office and many retail establishments. Tight lines and good fishing!

– Lt.

Lt.

We're planning a Florida vacation and my children have heard that crabbing is fun. They want to try their hands at it. Any advice?

– D.B.

Dear D.B.

What's more fun than crabbing? Eating what you catch! Crab traps are not expensive and I recommend plastic coated traps. They certainly resist rust better than the uncoated ones.

For children under 16 no license is required. A three-day non-resident saltwater license is only $6.50; a seven-day license is $16.50. A recreational fishing license limits you to no more than five traps and a daily catch of two five-gallon buckets of blue crabs (whole).

Now for the sticky part. As a recreational crabber, it is illegal to put your traps in navigation channels, near or next to commercial traps and to leave your traps out overnight. The buoys marking your traps need your name and phone number attached. The best thing to do is put out the traps in the morning and take them up at the end of the day. Good luck and enjoy your visit.

– Lt.

CALENDAR

September		
8	Kids' Fishing Clinic	Port Salerno
15	Florida Sportsman Show	West Palm Beach
15	Project WILD/Aquatic WILD Workshop	Orange County
28-30	Call of the Wild	Ocala
29	Florida Sportsman Show	Miami
October		
5-6	Black Bear Festival	Umatilla
12	Ladies, Let's Go Fishing!	Islamorada
12-13	Birding and Wildlife Festival	Curry Hammock
13	Florida Sportsman Show	Tampa
17	Kids' Fishing Clinic/Boat Show	St. Petersburg
26-28	Project WILD/Outdoor Adventure	Ocala
27	Kids' Fishing Clinic/Boat Show	Fort Lauderdale

Florida WILDLIFE®

Coming in November-December

- **Annual Photo Contest Winners**
- **Gulf Coast Salt Marsh**
- **A Million Redfish**

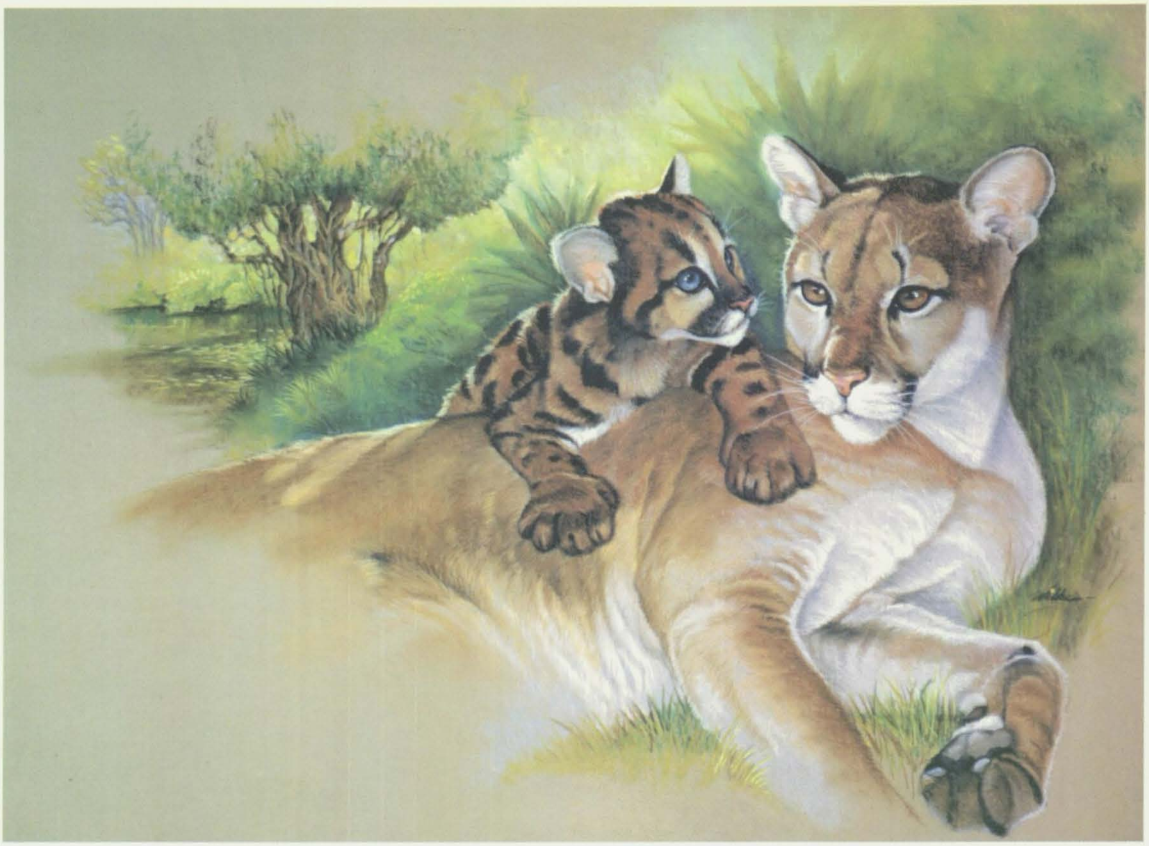


Image size approximately 12 x 17 inches

Everglades Queen

Limited edition print by Pat Tadena

Here is your chance to own this new print entitled *Everglades Queen* by Pat Tadena. Printed on quality, heavy pH-neutral paper, this print can be yours for $60. A portion of each sale will benefit the *Florida Wildlife* magazine publishing fund.

Please send a check or money order for $60 per print to the Wildlife Foundation of Florida, Inc. Florida residents must include $4.20 sales tax for each print ordered. Add $4 for shipping inside the U.S. Send to: Pat Tadena Print, P.O. Box 11010, Tallahassee, FL 32302. Allow 2-4 weeks for delivery. Multiple prints can be shipped as one order. Please include a daytime phone number.